

Public Utilities



Volume 68 No. 13

December 21, 1961

BOSTON UNIVERSITY
BUSINESS AND ECONOMICS LIBRARY

BY TRENDING RATES, CAN YOU PREDICT CHARGES?

By Frank F. Watters

« »

How New Accounting Techniques Can Improve Earnings

By Willard F. Stanley

« »

How Do Utility Earnings Grow?

By M. Richard Sussman

« »

What Do Insurance Company Investors Look for?

Do you have a Utility



problem?

America is growing.

Our population is not only increasing in numbers, it's spreading. Industry is expanding to meet challenging new opportunities.

And Utilities are faced with enormous capital expansion to provide for the growing needs of industry and consumers.

This is where the Irving can be of particular help—by assisting Utilities

in making the many financial decisions incidental to growth.

Our Analytical Studies, Seminars and Round Table Conferences have helped many Utilities bring added vitality to their capital planning, financing and cultivation of the financial community.

For information, you are cordially invited to call our Public Utility Department at LL 3-2967 or write us at One Wall Street.

IRVING TRUST COMPANY

Capital Funds over \$155,000,000 One Wall Street, New York 15, N.Y. Total Assets over \$1,750,000.00

GEORGE A. MURPHY, *Chairman of the Board*

WILLIAM E. PETERSEN, *President*

Public Utilities Department—JOHN F. CHILDS, *Vice President in Charge*

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

Edit

As i

Ad

Cir

PUBLIC
for fed
privatel
publicly
fair and
discrim
equitabl
and, in
free en
for the
ing pu
topics.
adverti
piece o
under
it bear
tion o
assum
presse

Subscr
Utilit
332 P
Allow

Entere
under
at B.
righte
Printe

Single
(26 i
sions,
Canad

Public Utilities

FORTNIGHTLY

Editor-in-Chief • ELLSWORTH NICHOLS

Editor • FRANCIS X. WELCH

Associate Editors • NEIL H. DUFFY

NORMAN J. BARATT

GEORGE E. TURNER

CHARLES M. BRUCH

MARIUS B. PELADEAU

Assistant Editors • M. C. MCCARTHY
M. L. WILLIAMS

Financial Editor • OWEN ELY

Advertising Manager • E. L. COOKE

Circulation Manager • E. S. STEVENS

REPRINTS OF ARTICLES

(200 or more copies)

available on orders received within 30 days after publication date.

Address

WASHINGTON OFFICE
for quotations.

PUBLIC UTILITIES FORTNIGHTLY . . . stands for federal and state regulation of both privately owned and operated utilities and publicly owned and operated utilities, on a fair and nondiscriminatory basis; for nondiscriminatory administration of laws; for equitable and nondiscriminatory taxation; and, in general—for the perpetuation of the free enterprise system. It is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

Subscriptions: Address correspondence to PUBLIC UTILITIES FORTNIGHTLY, circulation department, 332 Pennsylvania Building, Washington 4, D. C. Allow one month for change of address.

Entered as second-class matter April 29, 1915, under the Act of March 3, 1879, at the Post Office at Baltimore, Md., December 31, 1936. Copyright © 1961, by Public Utilities Reports, Inc. Printed in U. S. A.

Single copies \$1.00. Annual subscription price (26 issues a year): United States and possessions, \$15.00; Pan American countries, \$15.00; Canada, \$16.00; all other countries, \$17.50.



VOLUME 68

DECEMBER 21, 1961

NUMBER 13



ARTICLES

By Trending Rates, Can You Predict Charges? Frank F. Watters 945

A discussion of the future trends of extension and expansion which will affect the California, and nation-wide, utility industry.

How New Accounting Techniques Can Improve Earnings Willard F. Stanley 957

The author explains the two "new" methods of accounting which, though popular in other industries, have not been widely adopted in the utility business.

How Do Utility Earnings Grow? M. Richard Sussman 965

Four general methods of causing earnings per share to increase.

FEATURE SECTIONS

Washington and the Utilities 969

Telephone and Telegraph 973

Financial News and Comment Owen Ely 976

What Others Think 985

What Do Insurance Company Investors Look for? . . 985

Swidler Speaks on Natural Gas Regulation 988

Pacific Northwest Talks about Utility Take over . . . 991

Comments on Russian Oil Exports 994

Report Hits Federal Regulation 995

The March of Events 997

Progress of Regulation 1001

Industrial Progress 15

• Pages with the Editors . 6 • Utilities Calendar . . . 13

• Coming in the Next Issue 10 • Frontispiece 14

• Remarkable Remarks . . 12 • Index to Advertisers . 26

PUBLIC UTILITIES REPORTS, INC., PUBLISHERS

Executive, Editorial &

Advertising Offices 332 PENNSYLVANIA BLDG., WASHINGTON 4, D. C.

Publication Office CANDLER BUILDING, BALTIMORE 2, Md.

Advertising Representatives:

New York 6: Robert S. Farley, 95 Liberty Street, COrtland 7-6638

Cleveland 15: Macintyre-Simpson & Woods, 1900 Euclid Avenue, CHerry 1-1501

Chicago 1: Macintyre-Simpson & Woods, 75 E. Wacker Drive, CEntral 6-1715

Pacific Coast: Pugh & Rider Associates, 404 Halliburton Building, 1709 West

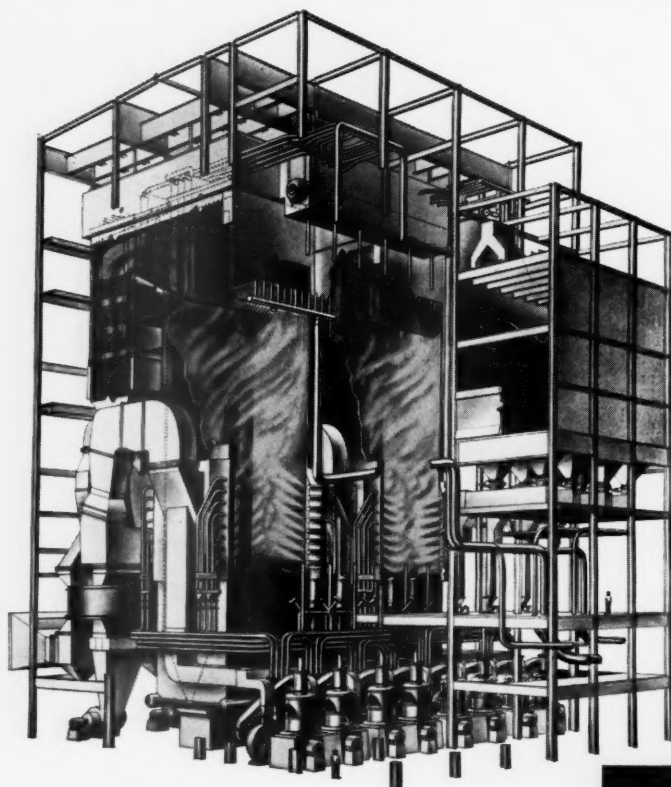
Eighth Street, Los Angeles 17, Calif., HUbbard 3-0537

In 1950, the C-E Controlled Circulation Steam Generator was made available to the electric utility industry as a fully developed and proven design. Several units were ordered during the year and the first of these was placed in service in November, 1952.

In the intervening decade, the Controlled Circulation Steam Generator has achieved unparalleled acceptance in utility power practice the world over. To date, about 43,000 megawatts of Controlled Circulation capacity has been purchased for utility service at home and abroad. In addition to country-wide installations in the U. S., Controlled Circulation Steam Generators are now in service or under construction in Australia, Canada, England, France, Italy and Japan. Principal statistics are shown opposite and in the accompanying chart.

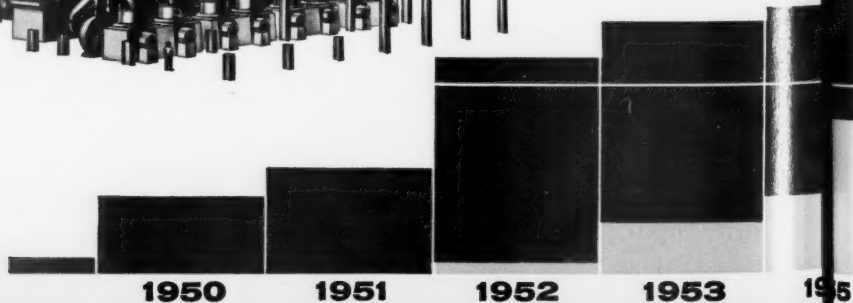
In the U. S., 37 utility systems have ordered units of this type for installation in 72 power plants located in 22 states. These systems have a total installed thermal capacity equal to more than 50% of the nation's total. Twenty-nine of these systems have ordered more than one unit, seven have ordered six or more and two have ordered twelve or more.

THE CONTROLLED CIRCULATION STEAM GENERATOR





C-E CONTROLLED CIRCULATION STEAM GENERATOR

Controlled Circulation Units like the one pictured have achieved world-wide acceptance in high pressure power practice.

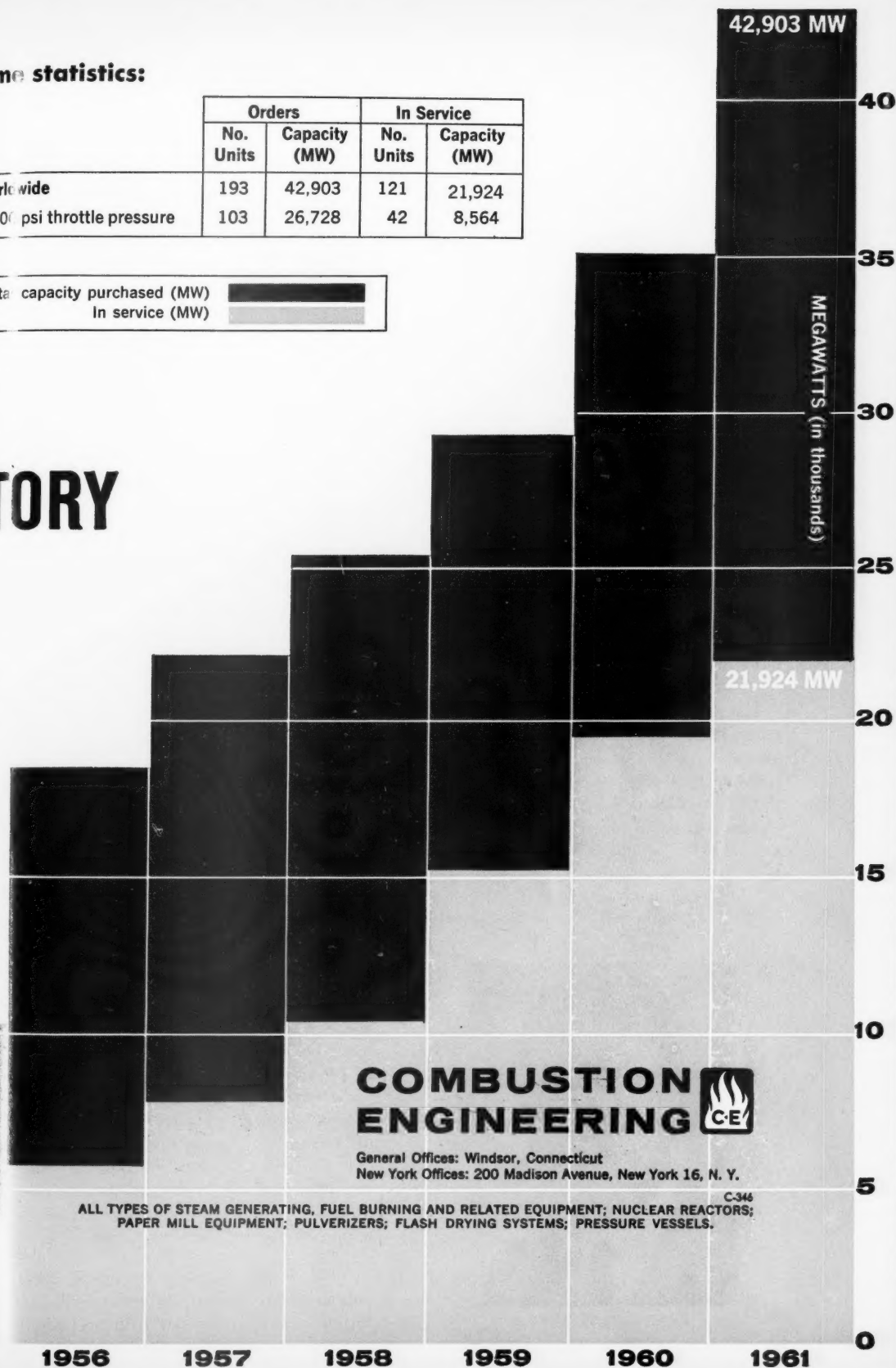


Some statistics:

	Orders		In Service	
	No. Units	Capacity (MW)	No. Units	Capacity (MW)
Worldwide	193	42,903	121	21,924
2,400 psi throttle pressure	103	26,728	42	8,564

Total capacity purchased (MW) 
In service (MW) 

STORY



COMBUSTION ENGINEERING

General Offices: Windsor, Connecticut
New York Offices: 200 Madison Avenue, New York 16, N. Y.

ALL TYPES OF STEAM GENERATING, FUEL BURNING AND RELATED EQUIPMENT; NUCLEAR REACTORS;
PAPER MILL EQUIPMENT; PULVERIZERS; FLASH DRYING SYSTEMS; PRESSURE VESSELS.

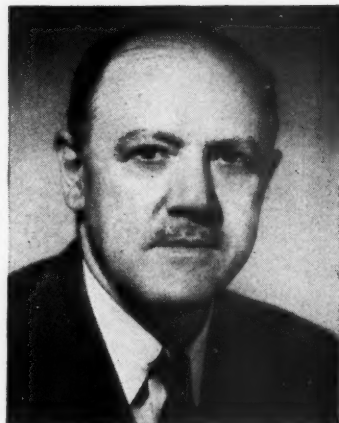
C-344

Pages with the Editors

WE are convinced that nothing much will ever come from just talk about tax reduction, whether for utilities or all the other infinite variety of taxpayers. It will take something in the nature of a spontaneous revolt before the politicians are convinced that people really care. No carefully or skillfully organized "protest" will do. That is too transparent.

To convince the political powers that taxpayers really mean business, it will take the same sort of voluntary spontaneous turnout of indignant taxpayers as crowd football bowls and other sports events across the land without organization or cajolery. If the people really *want* tax reductions or to oppose tax increases, they will have to make themselves felt and heard by such unequivocal and unmistakable action.

LAST month, for example, the Baltimore Board of Estimates held a special hearing for taxpayers to obtain public reaction to a plan for the biggest budget in the city's history, plus a 3 per cent tax on the household use of utility services—gas, electricity, and other fuels. Yet, not a single taxpayer put in an appearance either to approve or protest. More recently, the same city council scheduled



© Fabian Bachrach
WILLARD F. STANLEY

a special hearing for taxpayers on the same proposition. At the time the meeting was supposed to start, only one city councilman was on hand and only five taxpayers. Two more councilmen drifted in within a half-hour and after another half-hour a quorum was finally available.

IF this seems to be making too much of an argument from experience in a single city, we need only multiply it by similar experiences throughout the United States. Who shows up at city halls or, for that matter, at legislative committees to protest taxes or even to approve them? How many show up? How can the politicians help but get the impression that the people just do not care very much, one way or the other—that the taxpayers have become indifferent to the complicated and tedious problems of government financing? Is it any wonder that the political leaders presume on such indifference by piling up the popular budget expenditures while stacking up the resulting tax load on such supposedly complacent, if not unpopular, targets as public utility services?

THIS is one of the problems to which public utility industries may well give serious thought, as government budgets



FRANK F. WATTERS


P U.R. EXECUTIVE

*Information
Service*



A fast-reading, weekly letter from Washington, devoted to developments in the Nation's Capital and state news of national significance affecting Public Utilities.

Dependable forecasts of what lies ahead in the utility field.



Annual Subscription \$50

Public Utilities Reports, Inc.

332 Pennsylvania Bldg.

Washington 4, D. C.

*Unusual
opportunity
for—*

Unusually Capable Middle Management Men

We are looking for two younger, middle management men whose background and experience are such that they could, by performance, qualify for officership in our Company in not more than five years—and we would hope at a much earlier date.

The men we are seeking are probably under 35. They combine operating and technical knowledge (including an engineering degree) with broad administrative experience at middle management levels. Successful candidates will likely have had background in a combination of two or more of the utility fields: electric, gas, telephone and water. They will have had experience in facilities planning and construction and property operation—but they also should have a broad view of the utility business, including regulatory, customer and governmental experience. They must demonstrate a comprehension of the real economic—as distinguished from facilities functioning—aspects of utility affairs.

Above all, they will be men who comprehend why the keystone to personal progress is achievement for the owners of a utility enterprise.

Starting compensation will be a significant increment over your present salary—but it will not be this immediate increase, nor our unusually fine program of “fringe” benefits, which attracts you. Rather, it will be the, we believe, extraordinary opportunities for rapid personal progress—financially and in status. Ours is a company whose administration is strongly committed to the principle of opportunity for ability and reward for productive endeavor, regardless of age or years of service. We evaluate not less often than annually the contribution each member of our administrative group makes toward the Company's progress and establish his compensation accordingly. A number of our staff have had their compensation doubled or tripled within periods of time unduplicated elsewhere in the industry.

Working conditions are unusually pleasant. Access to top management is unusually free. The opportunity for personal development and demonstration of worth is, we believe, exceptional.

If you are such a man, write us the full details of your education, background and experience, including your present responsibilities and compensation. If you know of someone you think can qualify, suggest that he write. All replies will be treated in complete confidence. Our organization knows of this advertisement.

Box 283

16th Floor

360 Lexington Avenue

New York 17, New York

at all levels—federal, state, and local—continue to skyrocket. Utility services are the ideal tax collectors. They are the painless “extractors,” insulating the political tooth pullers from direct contact with the tax-paying victims who must pay for it all in the end, whether on their utility bills or elsewhere. We surely have come a long way from the day of the Boston Tea Party or, for that matter, from the Whiskey Rebellion—when citizens descended en masse to demand satisfaction for complaints about taxes.

PERHAPS it is because we have become so accustomed to ever-increasing tax loads that the spirit of protest has become dormant if not dead. For those idealists who may see in this evidence that citizens are, perhaps, responding to their responsibilities, the plain answer is that the supporters of these taxes do not show up either. But one thing is certain: The bills utility customers will have to pay are going to go higher and higher, unless the problem of arousing consumer interest in who is collecting how much from whom and for what is solved.

THE opening article in this issue comes to us from a member of the staff of the California Public Utilities Commission. He is FRANK F. WATTERS, recently made chief of the Gas and Electric Branch. WATTERS is an engineering graduate of the University of California, Berkeley ('35). He was first employed by the Tennessee Valley Authority and spent

some time with an oil company in the Near East before joining the California commission in 1940.

* * * *

PROFESSOR M. RICHARD SUSSMAN of The Pennsylvania State University, College of Business Administration, in this issue (beginning page 965) has written a sequel to his recent contribution to the FORTNIGHTLY comparing price-earnings with price-dividends. In his latest article he takes up the important questions of how utility earnings grow and analyzes the influence of earnings and dividends on common stock prices of investor-owned utilities by applying his theories to the operation of an hypothetical electric company. DR. SUSSMAN is a graduate of Ohio State (MBA, '52) and received his PhD in business administration at the University of Michigan in 1960. He has worked as a security analyst for a Chicago bank before starting his teaching career at the University of Michigan.

* * * *

WILLARD F. STANLEY, author of the article on new accounting techniques and their effect on earnings which appears on page 957, is president of Corporate Services, Inc., Brooklyn, New York, who has frequently written articles on public utility finance and accounting for this magazine. In this article he discusses two accounting treatments which MR. STANLEY believes are not being used by the great majority of investor-owned utilities in this country, but which possibly might add considerably to the common stock earnings of utilities if they were successfully employed.

WE take this opportunity to wish all our subscribers and friends the merriest of Christmases and the happiest of New Years.

THE next number of this magazine will be out January 4th.



M. RICHARD SUSSMAN

The Editors

STONE & WEBSTER SERVICE CORPORATION CAN HELP YOU FIND THE RIGHT ANSWERS TO THESE PEAK SHAVING QUESTIONS

Stone & Webster Service Corporation has aided many Gas Utility clients in resolving the eight vital questions asked below.

- 1 What should be done when the capacity of present peaking facilities is reached?
- 2 What are the comparative capital and operating costs of the various peak shaving methods available to management?
- 3 What is the most favorable location for new peaking facilities to coincide with future system growth?
- 4 What volumes of peaking gas can a utility economically purchase from transmission companies?
- 5 Should a utility request additional quantities of firm pipeline gas to meet future load requirements and if so, how much?
- 6 Should existing high operating cost peaking facilities be abandoned in favor of new facilities?
- 7 Can the expenditure of capital for the installation of new peak shaving facilities be delayed and if so, what penalties or risks are involved?
- 8 Where transmission company capacity has lagged load growth requirements, can a block of customers be added through the temporary use of expanded peak shaving facilities and if so, what are the economics involved?

Stone & Webster Service Corporation has been faced with these and many other special problems related to peak shaving during its many years of rendering advice to gas utility clients. We have prepared pioneering studies in such fields as the refrigerated storage of propane and the liquefaction of natural gas for peak shaving use. We invite your inquiry concerning your special problem.



STONE & WEBSTER Service Corporation
90 Broad Street, New York 4, New York

Coming in the Next Issue...

(JANUARY 4, 1962, ISSUE)

WASHINGTON OUTLOOK FOR UTILITIES IN 1962

With the Kennedy administration almost a year in office and the 87th Congress beginning its second session, the year 1962 should turn up some developments of particular interest and definite impact for public utilities in Washington. A new Federal Power Commission, entirely appointed by the President and top officials of the Interior Department and the REA are beginning to show the first signs of policy pressure. The vacillating counterinfluences of inflation, international crisis, emphasis on defense and other spending—all serve to make the nation's capital more than ever a three-ring circus. Following his annual custom for some years, Francis X. Welch, editor of *PUBLIC UTILITIES FORTNIGHTLY*, gives us his "forecast" of coming events in Congress and the federal agencies.

SOME ARGUMENTS FOR PRICE LEVEL ADJUSTED DEPRECIATION

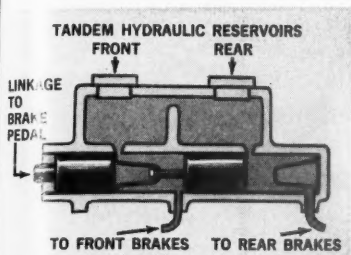
Is original cost depreciation a regulatory concept which must be retained regardless of inflation or the degree of inflation? Or has it been demonstrated to be inadequate to the task of compensating utility owners for the wearing out of plant investment in the public service? F. Warren Brooks, vice president of finance of The Cleveland Electric Illuminating Company, has written an article supporting his view that original cost depreciation fails to reflect the true economic cost of doing business, resulting in the incomplete recovery of capital and the overstatement of real earnings. This article shows moreover that price level adjusted depreciation correctly applied can rectify such inadequacies and become the guardian angel of capital investment against the counterevils of both inflation and deflation.

SALES PROMOTION YARDSTICKS FOR THE GAS INDUSTRY

Nearly two years ago Professor William T. Kelley of the Wharton School of Finance and Commerce, University of Pennsylvania, did an article on yardsticks for sales promotion for public utilities. This was so well received that the same author was asked to do another article along the same lines showing up-to-date current trends and discussing what specific use can be made by management of the yardsticks so developed as proposed. The result is a series of seemingly irrefutable arguments in favor of systematic and aggressive sales promotion.

AND IN ADDITION . . . Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.

Before You Buy Any Fleet Car...Check For These Quality And Savings Features... You'll Buy Rambler For '62



New Self-Adjusting Double-Safety Brakes

33,000-MILE CHASSIS LUBRICATION

1962 Rambler Classic 6 and Ambassador V-8 chassis lubrication period is 33,000 miles or 3 years, whichever occurs first. Many parts lubricated for life on all models. This further evidence of Rambler quality saves you time and money.

4,000-MILE ENGINE-OIL CHANGE

Under normal driving conditions, you change engine oil only one-half as often on 1962 Rambler American, Classic and Ambassador. Oil filters are standard at no extra cost on all 1962 models.

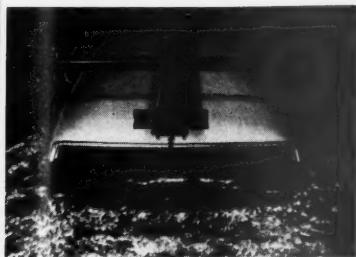


New 2-Year Engine-Coolant Protects to 40 Below

A TOTAL
OF 102
IMPROVEMENTS
IN RAMBLER
FOR 1962!

2-YEAR BATTERY GUARANTEE

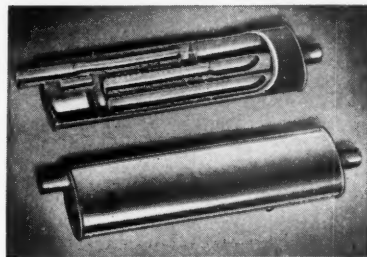
Warranty on new Rambler Power-Guard Battery doubled. If battery fails during first 2 years or 24,000 miles, whichever occurs first, (misuse, negligence or accident excepted) it will be replaced without charge by an authorized Rambler dealer.



Deep-Dip Rustproofing Clear to the Roof

NO-CLUTCH-PEDAL E-STICK TRANSMISSION

Gives the precise control of personal shifting without the inconvenience of clutch pedal at 1/3 the cost of full automatics. Optional on 1962 Rambler American models.



Long-Life Ceramic-Armored Muffler and Tailpipe



*For Free On-The-Job Test,
See Your Rambler Dealer
or Write:*

FLEET SALES DEPARTMENT J-1221

AMERICAN MOTORS

14250 Plymouth Road, Detroit 32, Michigan

Rambler

*World Standard
of Compact Car Excellence*

Save On Fleet Leasing

If your firm leases cars, ask your leasing company for low Rambler rates, or write us for the names of leasing companies in your area.

Remarkable Remarks

"There never was in the world two opinions alike."
—MONTAIGNE

ABRAHAM RIBICOFF
*Secretary of Health, Education,
and Welfare.*

"Public opinion is molded by the home-town newspapers in our 50 states."

C. DOUGLAS DILLON
*Secretary of the
Treasury.*

"Everything we do depends on having a sound economy, which, in turn, means a sound fiscal system."

J. T. WAGGONER
*Commissioner, Birmingham,
Alabama.*

"The outstanding lack of interest in the public's business on the part of the citizens is a matter of dire concern. This apathy is an invitation to shoddy government."

ERNEST HEMINGWAY
Late author.

"The first panacea for a mismanaged nation is inflation; the second is war. Both bring a temporary prosperity; both bring a permanent ruin. Both are the refuge of political and economic opportunists."

JOHN F. KENNEDY

"If we can provide a strong economy here at home, with steadily improving life for all of our people, then we can maintain our position abroad with more effectiveness, and we can demonstrate what a free system can do in this competing world."

NEWTON N. MINOW
*Chairman, Federal Communications
Commission.*

"Rating censorship is a result of the almost desperate compulsion of some of our licensees to work and to live by the numbers—always striving to reach the largest possible audience in order to attract and hold the mass advertising dollar. Dollar censorship exists where the broadcaster simply abdicates his own judgment and turns programming decisions over to an advertiser or his agency."

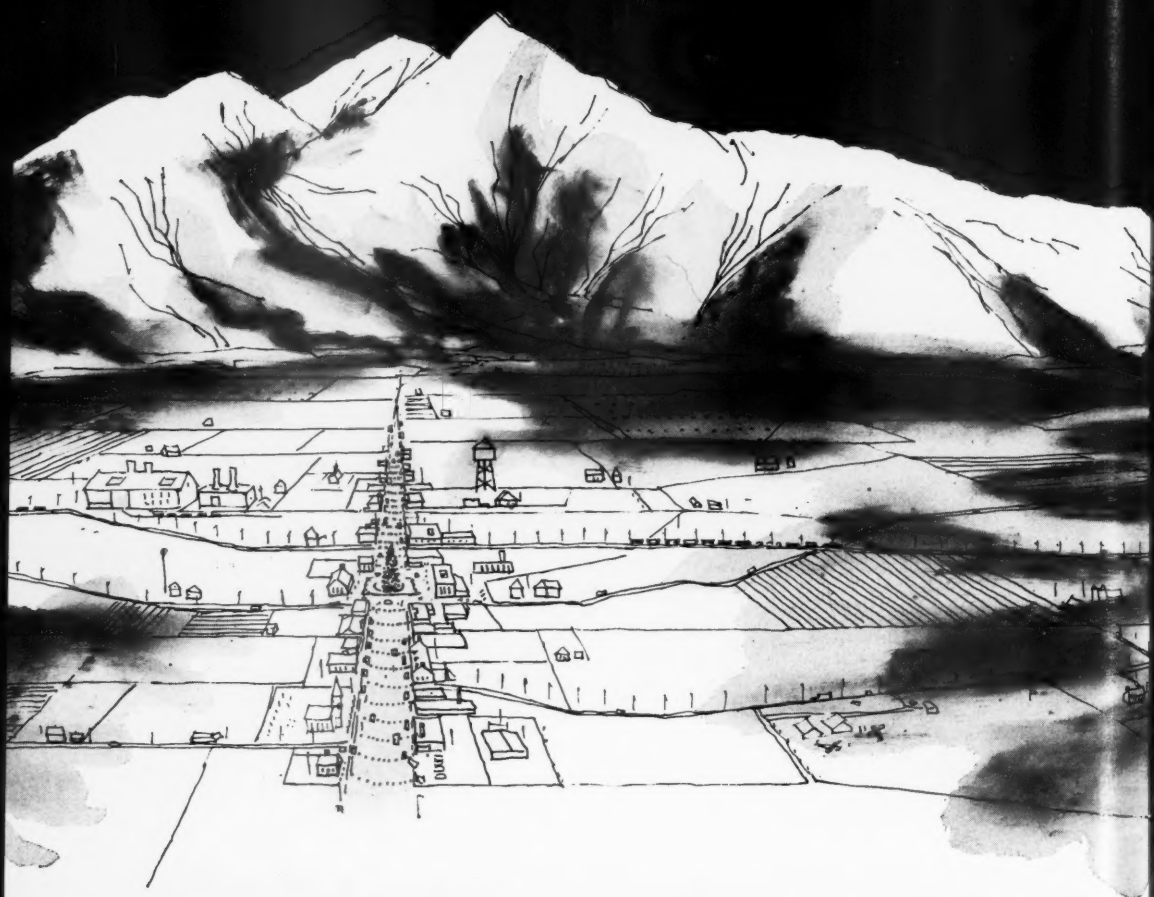
RALPH T. MOORE
Writing in the Oregon Voter.

"It is said that to be successful in American politics one must learn to shun logic and to acquire, instead, a consummate skill in sloganizing and posturing. This is because of the American weakness for, and resort to, the catchword or phrase that seems to sum up the issue in a neat and attractive package. Just about every public issue is inevitably so characterized that the individual can grasp the meaning without much, if any, mental effort. But, to the thinking person, this trait all too obviously lends itself to gross imposition and deception since no slogan nor catch phrase can possibly be devised to tell the whole story honestly and completely. The enemies of freedom find a happy hunting ground in our public habits of apathy and superficiality."

Utilities Events Calendar

CHECK THESE DATES:

- Dec. 27-29—American Marketing Association will hold annual winter conference, New York, N. Y.
- Jan. 9-11—National Symposium on Reliability and Quality Control will be held, Washington, D. C.
- Jan. 15-17—National Telephone Co-operative Association will hold annual meeting, New Orleans, La.
- Jan. 17—New England Gas Association, Operating Division, will hold meeting, Framingham, Mass.
- Jan. 18-19—Public Utilities Advertising Association, Region 9, will hold meeting, Palm Springs, Cal.
- Jan. 19-21—Advertising Association of the West will hold annual conference, Fresno, Cal.
- Jan. 21-24—National Association of Electric Distributors will hold southern regional meeting, Palm Beach, Fla.
- Jan. 22-25—Plant Engineering and Maintenance Show and Conference will be held, Philadelphia, Pa.
- Jan. 22-26—American Society of Mechanical Engineers will hold symposium on thermophysical properties, Princeton, N. J.
- Jan. 22-26—National Fire Protection Association will hold technical committee meetings, New York, N. Y.
- Jan. 23—American Water Works Association, New York Section, will hold luncheon meeting, New York, N. Y.
- Jan. 24-25—Southeastern Electric Exchange, Legal and Claims Committee, will hold meeting, New Orleans, La.
- Jan. 28-31—American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc., will hold semiannual meeting, St. Louis, Mo.
- Jan. 28-Feb. 2—American Institute of Electrical Engineers will hold winter general meeting, New York, N. Y.
- Jan. 29—First National Salesmen's Week will begin.
- Jan. 31-Feb. 2—American Management Association will hold session on industrial preparedness-planning for corporate continuity and survival, New York, N. Y.
- Feb. 4-6—National Association of Purchasing Agents will hold public utility buyers' group meeting, San Francisco, Cal.
- Feb. 5-8—National Industrial Electric Heating Conference will be held, Cincinnati, Ohio.
- Feb. 5-9—American Society for Testing Materials will hold committee week, Dallas, Tex.
- Feb. 7—Advertising Federation of America will hold midwinter legislative conference, Washington, D. C.
- Feb. 7-9—American Public Power Association will hold workshop meeting, Memphis, Tenn.
- Feb. 7-9—National Winter Convention on Military Electronics will be held, Los Angeles, Cal.
- Feb. 8-9—Edison Electric Institute-American Gas Association will hold accounting conference final working meeting, Cleveland, Ohio.
- Feb. 9-11—Air-Conditioning and Refrigeration Wholesalers will hold annual convention, Los Angeles, Cal.
- Feb. 11-17—National Electrical Week will be held.



MERRY CHRISTMAS

Public Utilities

FORTNIGHTLY

VOLUME 68

DECEMBER 21, 1961

NUMBER 13



By Trending Rates, Can You Predict Charges?

The future trends of extension and expansion which will affect the California, and nation-wide, utility industry.

By FRANK F. WATTERS*

THE California Public Utilities Commission is both a court of record and an administrative tribunal, exercising judicial and legislative powers. Its legislative functions relate to rate, service, safety, finance, accounting, and certificate matters as concern more than 1,500 privately owned utility and transportation companies which serve millions of Californians. These companies include 17 gas, 17 electric, 51 telephone, 10 telegraph, 495 water, and two steam heat utilities, as well as a host of transportation companies and other operations in this field. This utility responsibility constitutes the bulk

of the commission's work. The determination of just compensation for properties sought through condemnation, reparation cases, contempt proceedings, and numerous other proceedings are among its judicial functions. Its objective is that of providing an adequate service to the public at the least practical cost.

Natural Gas Supply Picture

FORECASTS indicate that total gas requirements for California's domestic, commercial, and industrial customers will approximate two trillion cubic feet for the year 1970. The 4.3 million gas customers served during 1959 consumed 921 billion cubic feet of gas. Thus, the gas require-

*Staff member, California Public Utilities Commission. For additional personal note, see "Pages with the Editors."

PUBLIC UTILITIES FORTNIGHTLY

ments are expected to double during the decade of the 1960's.

Commencing in 1947, the private gas-distributing utilities started to purchase gas via interstate pipelines from the El Paso Natural Gas Company. Today, El Paso's deliveries average 2.2 billion cubic feet per day. Transwestern Pipeline Company now also brings in out-of-state gas and currently delivers an average of nearly one-third billion cubic feet per day. By the end of 1960, additional out-of-state procurements filled 77 per cent of the state's natural gas utility needs. There are now two additional interstate pipeline systems in the offing. One, a joint project of a number of companies affiliated with the Pacific Gas and Electric Company, is under way and will bring gas from Alberta, Canada, to California. The other, a joint proposal of the El Paso Natural Gas Company and the Colorado Interstate Gas Company, is under active consideration and would supply southern California with gas from Panhandle, Rocky Mountain, and New Mexico sources.

THERE is still another pipeline system proposed which would supply southern California with gas from south Texas and Mexican sources for which basic agreements have been reached by the parties. This is a joint proposal of California Gas Transmission Company and Southern California Edison Company involving contracts with Humble Oil Company and Petroleos Mexicanos. This project would supply gas from Gulf coast United States sources and from Mexican sources via a pipeline across northern Mexico to the California border where the California Gas Transmission Company would take

over, operating the pipeline system between Mexicali and the southern California load center.

Extension Rules

As commission-directed extension rules often affect the growth of California utilities, when in competitive areas, it would be helpful to review briefly their principal features. All such rules currently in effect—gas, electric, and water—have been formulated by the commission within the past eight years. The latest electric and gas rules were adopted in October of 1960.

Extension rules have been prescribed for these services by the California commission so as to avoid or minimize the effect of speculative developments upon a utility's other customers. If a utility installs facilities either to serve such developments or which require excessive lengths of extensions compared with the number and type of new customers to be served, these speculative and uneconomical extensions could be a burden on all of the utility's customers when reflected in the rates charged.

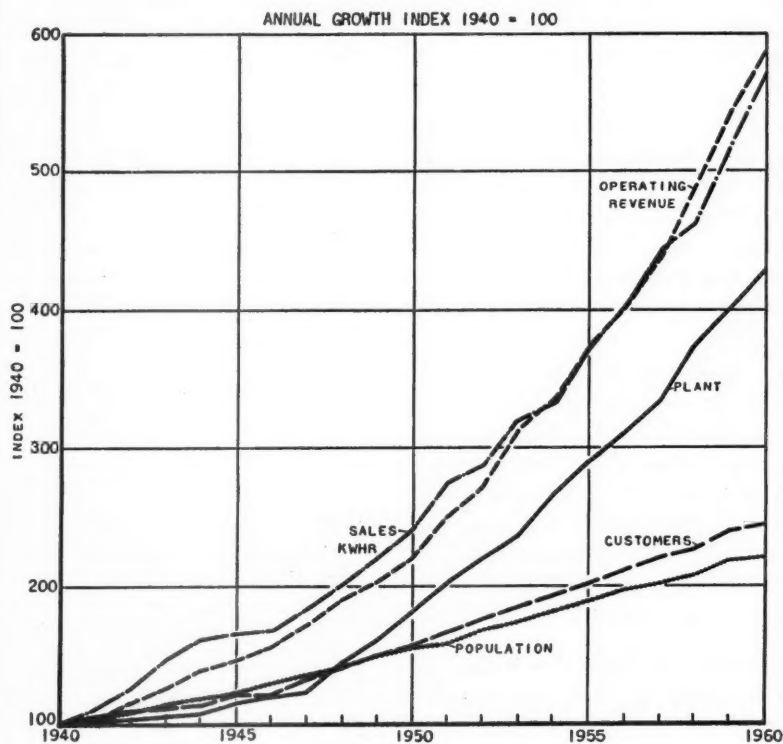
Water Main Extension Rule

THE present main extension rule in effect for all commission-regulated water utilities in the state accomplishes such primary objective by providing for the refunding of subdividers' advances for construction on the basis of a fixed percentage of the revenue estimated to be derived from new customers served by the extension. Even for extensions which are neither speculative nor uneconomic, this refunding provision has an effect on water rates due to the rather long period of time before the utility is required to

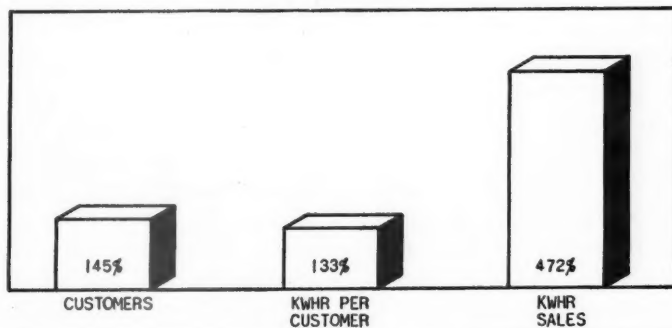
BY TRENDING RATES, CAN YOU PREDICT CHARGES?

GROWTH TRENDS LARGE ELECTRIC UTILITIES

1940-1960



PERCENTAGE GROWTH



PUBLIC UTILITIES FORTNIGHTLY

actually invest its own funds in the new facilities. This is because funds advanced for a main extension and not yet refunded are deducted from the investment by the California commission in rate determinations, although depreciation expense is allowed on the related plant.

AN alternate refunding method, seldom utilized by water utilities, however, permits the refunding of the pro rata cost of a fixed footage of extension for each new customer served. This method would result in almost immediate refund of advances for any reasonably dense new home development.

It is of interest to note that a recent survey made by the staff of the California commission, in connection with a review of the reasonableness of the present rule, disclosed that the vast majority of publicly owned water systems require that the cost of main extensions be wholly or partly contributed by the applicant for the extension, without refund.

Electric and Gas Extension Rules

EXTENSION rules for commission-regulated electric and gas utilities accomplish the same primary objective by providing "free footage" allowances, but based largely upon the number and types of appliances actually to be served.

Aside from the direct effect on utility rates, there is an additional problem in certain areas served by a municipally owned electric utility and a privately owned natural gas utility. Here, both compete for the same customer for heating load requirements. This problem concerned the commission, and in its recent decision which prescribed the extension rules for these services, it stated:

... (9) there being certain gas-serving areas and certain electric-serving areas in the state supplied by publicly owned utilities not subject to this commission's jurisdiction, a period of 180 days should be allowed during which these publicly owned utility managements may consider the principles outlined herein with the possibility of amending their rules to be in harmony therewith; and if this does not eventuate the privately owned utilities may deviate from the rules prescribed herein upon adequate showing and substitute special rules to be applicable in the serving area involved in order that the ultimate customer may have equal opportunity to select gas or electric appliances ...

The economic interplay under such conditions presents some real problems to these utilities and to those who respectively regulate them.

Good Service Is Good for Business

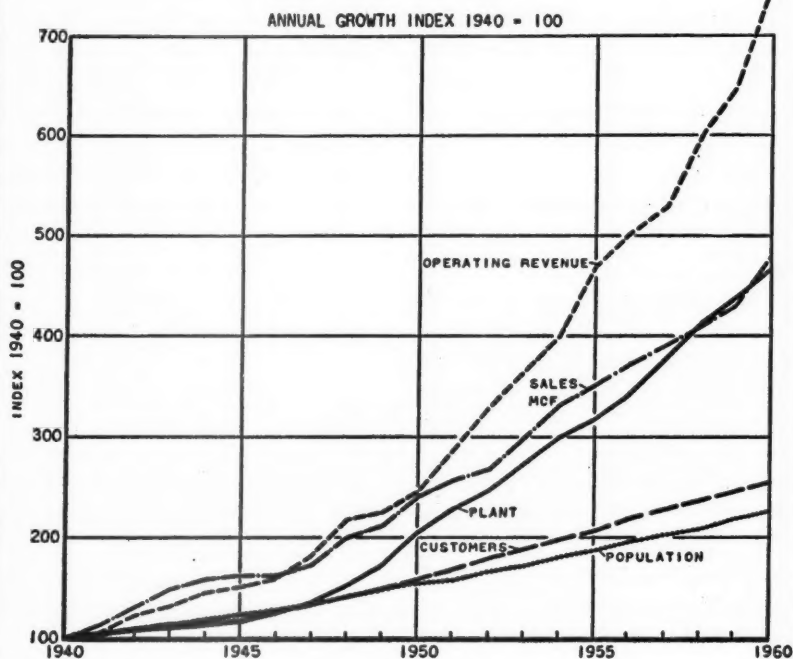
GOOD service is in the public interest and good service is certainly good for business! A well-designed and operated utility, providing adequate service to all its customers, is an asset to everyone—the consumer, the community, the utility, and the industry it represents.

Thus, one of the principal causes for privately owned utility service to be taken over by public authority is poor service. Under certain circumstances such transfer appears to be the most practical course open at the time. I know of a few situations where even the California commission hoped—often wishfully—for relief in the broad public interest by way of transfer of some utility to public owner-

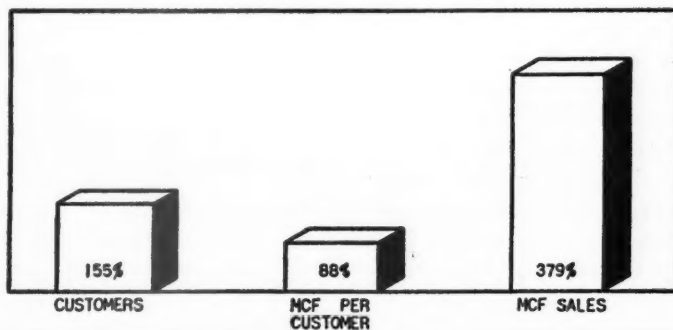
BY TRENDING RATES, CAN YOU PREDICT CHARGES?

GROWTH TRENDS LARGE GAS UTILITIES

1940-1960



PERCENTAGE GROWTH



PUBLIC UTILITIES FORTNIGHTLY

ship. In such a situation private management has obviously failed. Rates are but a secondary consideration in such a problem—service is what really makes the difference.

GOOD utility service when provided by a private company is a definite deterrent to public ownership. This has been demonstrated on numerous occasions. Is size, then, the criterion for public ownership? I think not.

Look at the privately owned electric and gas giants serving the greater part of the state of California. Pacific Gas and Electric Company is the largest combined private natural gas and electric utility in the United States. The Pacific Lighting Group—Southern California Gas Company, Southern Counties Gas Company of California, and their supplier, Pacific Lighting Gas Supply Company—make up the largest private natural gas utility system in the United States. The private electric utilities have developed an extensive system of hydroelectric plants on our mountain streams and rivers. This power has been supplemented at an accelerating rate in recent years through gas- and oil-fueled steam-electric generating plants situated close by their load centers. In fact, two-thirds of all electrical energy available in California is produced from burning fuels. The local natural gas industry has gone to Texas and Canada for supplies—thousands of miles away! Far-sighted electric management has not even stopped here, though, for now nuclear power is under actual construction for California's privately owned electric generating capacity. Telephone service is almost entirely in the hands of private ownership, even nation-wide.

DECEMBER 21, 1961

Municipal and Private Utility Service Is Competitive

COMPETITION between private and public service goes on every day. To the extent that both complain, both must be getting a fair share of the new business. The city of Los Angeles, through its Department of Water and Power, competes aggressively with Southern California Gas Company for sale of heating and cooking energy, much as the Sacramento Municipal Utility District competes with Pacific Gas and Electric Company. Even water sales are competitive in certain areas of California—Dominguez Water Corporation provides a competitive industrial service inside the recognized service area of the city of Los Angeles.

Such competition serves a useful purpose as it keeps both forms of ownership alert to furnishing the service at the lowest economically feasible rate. The customer cannot fail to benefit as long as the service is not duplicated.

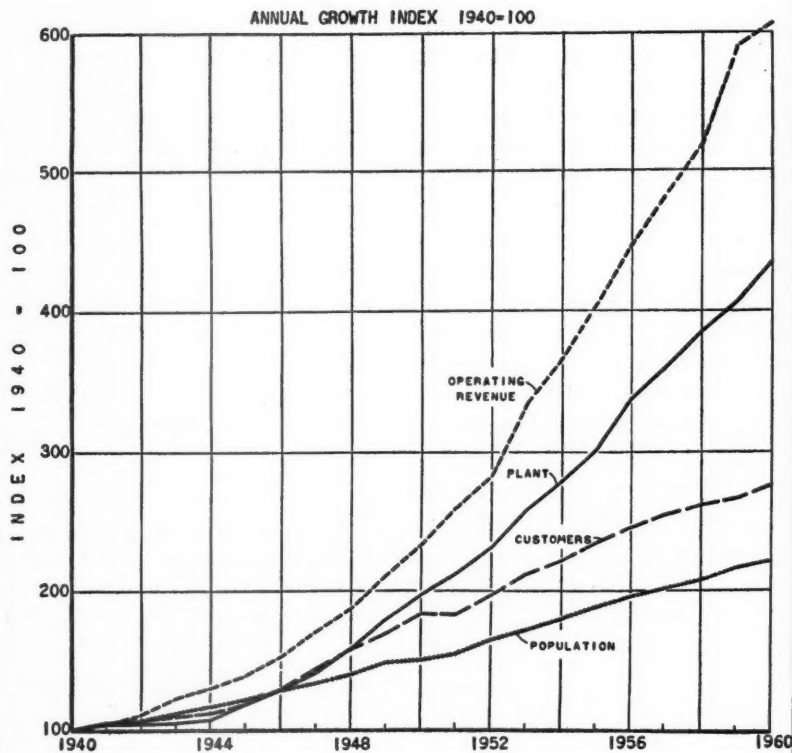
Nor are private utilities exempted from such competition under commission regulation. Southern California Edison Company must compete against two southern California natural gas companies for heat-energy sales. Only when electric and gas services are offered by the same company does this cease. San Diego Gas & Electric Company and Pacific Gas and Electric Company are in this enviable position. Private water utilities also compete very actively for new business in areas of rapid home development.

Private Utilities Do Not Compete on Equal Terms

A PRIVATELY owned utility operation must be very efficiently managed to be competitive with a municipal service

BY TRENDING RATES, CAN YOU PREDICT CHARGES?

GROWTH TRENDS LARGE WATER UTILITIES 1940-1960



1951 CUSTOMERS, REVENUES, AND PLANT REFLECT SALE
OF LOS ANGELES WATER PROPERTIES OF SOUTHERN
CALIFORNIA WATER COMPANY TO THE CITY DURING 1951.

PUBLIC UTILITIES FORTNIGHTLY

because it carries a tax burden not shared by public ownership. While we are aware of this difference, perhaps we are not too aware of its magnitude. Let me demonstrate this point with figures.

The private California electric utilities in 1959 paid out \$193 million in taxes. Of each dollar collected from customers, 25 cents thus went for taxes. Roughly, half of this tax bill was for federal taxes and half for other taxing authorities. In 1959, the California natural gas companies paid a tax bill of \$77 million. Thirteen cents of each gross revenue dollar went directly to the tax collectors. A comparable amount was paid by the pipeline supplier from California purchases.

Pacific Gas and Electric Company paid just the city and county of San Francisco \$7,372,000 in franchise and ad valorem tax payments. Southern California Gas Company paid the city of Los Angeles \$723,000 in franchise taxes alone. These amounts, of course, are exclusive of any sales or use tax payments.

Even the smaller water utilities in the state made a sizable tax contribution. In 1959 they collectively paid a tax bill of nearly \$13.5 million, or \$14.35 per customer. Related to revenue, 22½ per cent of the revenue from water customers was required just to cover the utilities' tax obligations.

MORE startling than even the tax bill is the increase in tax obligation in recent years. The electric utilities experienced a 241 per cent increase in their total tax bill in just the ten-year period from 1949 to 1959, even though the federal electric energy tax was abolished during this period. The gas utilities' total tax bill

increased 272 per cent during the same period.

The tax obligation of the private utility corporation requires it to increase charges to customers by a little over \$2 for every \$1 increase in its net earnings. This relationship presents no small obstacle to private ownership when a general rate increase is required.

Each privately owned utility acquired by a public body shifts the tax burden currently carried by that utility to other taxpayers. This creates an advantage for the people residing in the area formerly served by such private utility because a substantial portion of the taxes are assessed by governmental authorities which extend over a much larger geographical area, such as county, state, and federal jurisdictions. Thus, others pick up the tab for the tax difference.

CARRIED to its ultimate conclusion—that of complete public ownership of utility service—the smaller area tax exemption advantage would disappear as no group would then be contributing to the general tax requirement through utility rates. Mind you, the same people are receiving the same service through the same facilities in this illustration. Nothing has changed physically, only the ownership has shifted from private to public. Even those who manage and operate the utility are substantially identical.

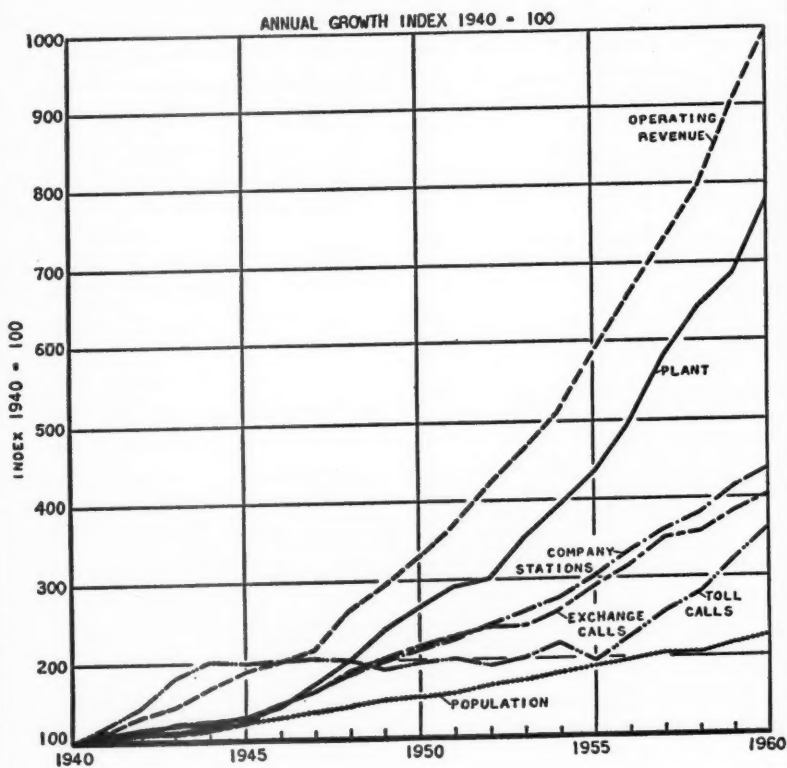
Rates

IRRRESPECTIVE of any tax or other advantage one form of ownership appears to have over another, I think we can all agree that it is the customer who pays for the cost of providing the service, be the charges direct or indirect. One

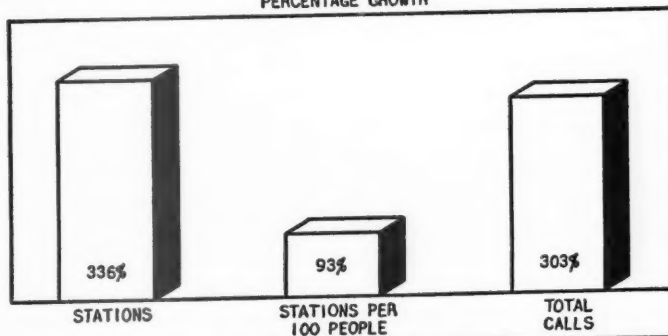
BY TRENDING RATES, CAN YOU PREDICT CHARGES?

GROWTH TRENDS LARGE TELEPHONE UTILITIES

1940-1960



PERCENTAGE GROWTH



PUBLIC UTILITIES FORTNIGHTLY

cannot discuss rate levels, however, without some understanding of the service.

Factors to Be Contended with

USAGE of utility services per customer has been on the increase for years. If rates were held constant, usage alone would cause considerable revenue growth. In a prosperous economy like California's the figures exceed national hopes for years to come. In Los Angeles, domestic electric usage has increased 54 per cent in the last ten years to an annual average domestic consumption of over 2,500 kilowatt-hours. While not so spectacular, water usage per capita increased 18 per cent to 181 gallons per day in this same city. (A national per capita water consumption of but 160 gallons per day is projected for 1975!)

For certain small and heavily flat-rate, commission-regulated, water companies, additional revenues derived from complete metering of the systems has, in itself, offset all other increases in cost to the extent of making general rate adjustments unnecessary. While not a solution for the fully metered system, increase in per customer usage often goes a long way toward compensating for rises in material and labor costs experienced.

THE cost of obtaining the commodity being distributed is often all important; the price of boiler fuel to the steam-electric generating operation, the wholesale electric energy rate to the nongenerating distributor, the rapid rise in field costs of gas, the cost to the gas utility of obtaining natural gas from distant sources, the price of butane and propane to the liquefied petroleum pipeline purveyor, and the distance from source—be

it across the land or down the well—to the water utility.

In water operations, extent of treatment and service area topography are also very important. As water is personally consumed, in addition to being wholesome, it must be palatable and esthetically pure. Because of its relative weight, it is costly to boost. It cannot be compressed to conserve transmission space nor can it be changed in character for more efficient transmission and distribution.

THE age of the very utility plant itself is a factor to be reckoned with in rate setting. All other factors being the same, a plant constructed in the 1930's can furnish the same commodity for a considerably lower cost than a duplicate plant constructed today. Inflation has left its mark!

In considering a return on the plant invested in providing the utility service as the California commission must, the utility with the highest percentage of old plant has the lowest revenue requirement and hence the lowest rates. This effect has, of course, been greatly offset in California because of the continuous plant expansion required in most areas to keep ahead of the population boom and load growth.

WHILE this relationship may not have such a direct effect on municipal utility rates, the rising cost of money during the last decade surely has. Here again a preponderance of older bond money permits lower rates than an operation financed on today's money market. This statement again assumes all other factors as being equal. In 1949 average interest on long-term bonds for California private utilities was 2.8 per cent. This

BY TRENDING RATES, CAN YOU PREDICT CHARGES?

interest rate rose continuously for the next ten years until it reached 5.1 per cent. This represents an increase of 82 per cent during the period.

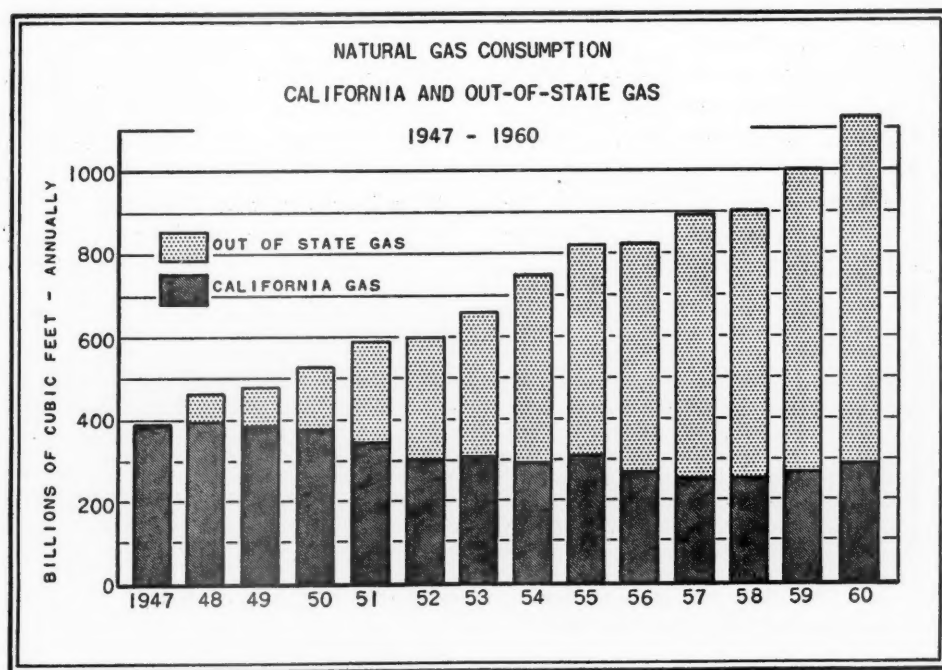
Although not taken into account directly in our regulatory rate formula, cost of money must be appropriately considered as it affects equity earnings and therefore the ability of a utility to attract capital for needed growth and replacement at today's higher costs. Increases in the cost of money have simply required higher rates of return to be allowed. Actually, regulated utilities operate at cost, plus the rate of return allowed by the commission.

Take Advantage of the Times, Ratewise

IN an expanding economy like ours, it is difficult to stabilize much of any-

thing—let alone utility rates. It might be assumed, then, that the trend in rates over the long pull will be ever-increasing. Should this be our destiny, let us turn it to our advantage—ratewise. When necessary to increase rates, revamp the rate structure so that present-day costs will be spread equitably and without discrimination to those classes responsible for the costs. What cannot be accomplished as a practical matter at any one such time can certainly be accomplished after several rounds when one keeps an eye on the ultimate goal. Separation or cost-of-service studies are an essential tool to this end.

The California commission stresses adequate service at the time of any general rate increase. Its regulatory concept is clear—reasonable rates *require* reasonable



PUBLIC UTILITIES FORTNIGHTLY

service. The incremental costs of furnishing a good service as compared with a poor service are relatively small. Adverse public reaction to poor service fully justifies bringing it up to acceptable standards. At the time of needed rate adjustment it is well for utilities to evaluate their service and practices in much the same light.

ONE practice to consider is the meter testing program. Gas meters have been tested periodically for a number of years by commission direction. Older types generally tend to run fast with excessive age and thus produce an overcharge in customers' bills. For quite the opposite reason, water meters are now also required to be tested. Old water meters tend to run slow and in time reach a position where it is to one's interest—dollarwise—to return them to a reasonable accuracy. Secondarily, continued use of any group of excessively slow meters in a portion of a service area is discriminatory to the other customers, as are fast meters to the customers who have them.

An electric meter test program is currently under study by the staff of the California commission. After all, meters are the cash register of the utility business.

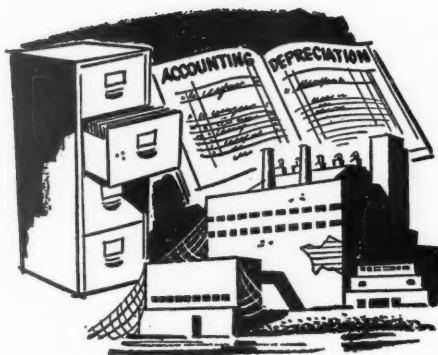
Conclusions

INSTEAD of unnecessarily concerning ourselves with trends—which are largely superimposed upon us anyway—as responsible utility people, why not direct our efforts now to providing, in the most economical manner, the type of service which we know is required of us in the public's interest? The very concept of "public convenience" is itself ever changing. Today we are faced with nuclear energy in the electric industry and the importation of natural gas from great distances, even from other countries. More and more we are recognizing our obligation to manage our vast natural underground water storage basins, so long neglected and now seriously overdrawn. Better utilization of our own enormous water resources is under way, but at a high price.

Tomorrow holds forth fresh water from the sea and extensive reclamation of our own waste waters. In the energy field, conversion of fuel to electricity in every household may not be just a gadget but a reality to be reckoned with. Who knows now what commercial by-products will come out of the missile age? To him who does, I give the task of projecting the trend.

"THE American Trucking Associations are now attempting to convince the Interstate Commerce Commission that the railroads, by setting low rates for products competitively carried by trucks, are deliberately losing money on piggyback operations in order to hurt trucking. This the railroads hotly deny. . . . On such progress the trucking companies and the Teamsters cast a jaundiced eye. When Hoffa recently spoke of the truckers who might lose their jobs because of piggybacking, the Brotherhood of Railroad Engineers retorted, 'Would it be in order for the 450,000 rail employees who have lost their jobs because of the trucking industry to send condolence cards?'"

—J. C. FURNAS,
Writing in the magazine *Quest*.



How New Accounting Techniques Can Improve Earnings

Two accounting treatments which are not being used by the great majority of investor-owned utilities in this country, but which possibly might add considerably to the common stock earnings of utilities if they were successfully employed.

By WILLARD F. STANLEY*

PRODUCTION of maximum per share earnings for the common stock continues to be the prime responsibility of utility management. There are two principal factors contributing to the price at which utility stocks sell in the market and these are (1) the ratio of per share earnings to current market price and (2) the dividend yield on the stock, based on such market price. Of the two, the "price-earnings ratio" is, in most cases, definitely the more important of the two factors.

Earnings can be considerably improved by adoption of new accounting techniques affecting various aspects of utility operations. These techniques may not be "new" in the sense of just having been originated but they are "new" to most utilities be-

cause they may not previously have come to their attention. While the additional earnings produced by each of these techniques may not appear spectacular in amount, they often prove sufficiently ample to warrant the time and trouble involved in installing the new accounting method.

AMONG the accounting techniques which are believed not to be widely used by utilities currently are (1) certain aspects of the capitalization of interest during construction, and (2) the charging to the cost of issuing securities of the portion of the salaries of executives properly assignable to this purpose.

Considering first the matter of capitalized interest during construction, the practice today followed by most utilities

*President, Corporate Services, Inc., Brooklyn, New York. For additional personal note, see "Pages with the Editors."

PUBLIC UTILITIES FORTNIGHTLY

is to capitalize this item and thus improve income and increase the cost of the properties for rate base purposes. This accounting technique, which is permissible under the Uniform System of Accounts both of state utility commissions and the Federal Power Commission, prevents income from being charged with the cost of money used on projects in course of construction, when no return on the investment can be expected until such projects are completed. Capitalization of interest during construction is usually accomplished by a special credit to income under the heading of "Income Deductions," representing the assumed overall cost of the funds tied up in construction. The rate taken for such overall cost (which includes both borrowed funds and a reasonable allowance for equity money, including retained common stock earnings and proceeds from sale of additional common stock) varies between companies, but 6 per cent is usually considered to be not unreasonable and is probably used as much as any other rate by the utilities following this accounting method.

THE Uniform System of Accounts leaves to the utility the extent to which interest during construction shall be capitalized; *i.e.*, the classifications of property to which such capitalization shall apply. Thus, it is believed that most companies using this technique restrict its use to relatively large and readily identifiable additions, such as turbines, transmission lines, etc. To apply the system to small work orders covering new customer connections would involve time and trouble beyond the gain to be realized from the treatment.

Among the items which it is believed

are not presently being included in the capitalization treatment by most utilities are items carried in the utility's inventory. These include such items as meters (and, in the case of electric utilities, transformers) which are principally to be used ultimately in construction work order projects for customer connections or otherwise. Application of interest during construction to such items can readily be made by crediting to income monthly the rate then being taken for interest during construction generally, applied to the amount of meters and transformers and other includable items held in inventory at the end of the preceding month.

ASSUMING a utility with \$200 million of net assets, a \$400,000 average annual balance of meters and other such items carried in inventory for use in construction projects might be considered as within a reasonable range. If 6 per cent per annum is assumed as the customary rate of interest during construction, the credit to income by virtue of such inventory items would run to \$24,000 annually and would thus increase common stock earnings accordingly. This assumes the utility elects not to treat the income credit as taxable income.

Taxpayers have a choice as to this and if they elect not to treat the interest during construction credit as taxable income, then this amount is not included in the cost of the additions for tax purposes, although it is, of course, included in the cost of the additions as carried on the books of the utility. If the utility chooses to treat the credit as taxable income, the gain in net income would be reduced by about a half by reason of the tax thereon (or to about \$12,000 annually), and in

HOW NEW ACCOUNTING TECHNIQUES CAN IMPROVE EARNINGS

this case the credit would be added to the tax base of the properties. Depreciation would then be deductible for tax purposes (as well as on the books) with respect to the amount so capitalized.

Use of Interest-free Funds

IT seems wisest to exclude the interest during construction from taxable income, since there is then a substantial economic gain to the utility represented by the use of the interest-free funds constituting the deferred taxes, over a period equal to half the life expectancy of the additions.

In the above case, with an assumed 50 per cent tax rate, this is equivalent to the free use of \$12,000 for a period of sixteen and a half years, assuming the project to have a total life of thirty-three years. At an assumed overall cost of money to the company of 6 per cent, the economic gain so created should approximate \$21,000 over the life of the project.

The total amount of meters, transformers, and other items included in inventory which could properly be treated as related to construction projects for purpose of capitalizing the cost of money on the amount thereof while held in inventory will necessarily vary considerably from month to month and year to year, but it seems reasonable to expect that a yearly average equal to the above assumption might be considered as largely of a recurring nature. On this basis, using the nontaxable assumption for the entire amount of the income credit for interest during construction on these items, the \$24,000 annual enhancement of earnings should be a permanent one, as long as the rate of expansion continues.

CAPITALIZATION of interest during construction necessarily increases the charge to income for book depreciation, since it increases the cost base on which the depreciation charge is computed. This would tend to decrease income, either to the extent of the full depreciation charge if the interest during construction is treated as nontaxable, or the extent of approximately one-half thereof at present tax rates, if the credit is treated as income for tax purposes. In either case, however, it would be a great many years before the sum total of net additional book charges for depreciation approached the amount of the original income credit for interest during construction. For instance, taking the first ten years of life of any project involved in the proposed accounting treatment, depreciation at 3 per cent per annum would accumulate to 30 per cent at the end of this period so that the \$24,000 increment to net income would be reduced thereby to about \$17 annually. This would make the average net increment to income for this ten-year period in the neighbor-



PUBLIC UTILITIES FORTNIGHTLY

hood of \$20,000 a year, which is still a significant figure to improve earnings by. All this assumes, as above, constant rate of property expansion and treatment of the income credit as nontaxable.

THERE is another aspect of capitalizing interest during construction which should not be overlooked; namely, the fact that the higher cost base of the property resulting therefrom necessarily increases the rate base of the properties by an equivalent amount and thus entitles the utility to a return on the amount so capitalized. Therefore, capitalizing \$24,000 annually with respect to meters and other items involved in the inventory would automatically result in around \$1,500 additional rate entitlement with respect to earnings. At the end of the ten-year period above referred to, this would have accumulated to a total annual increased entitlement of \$15,000. This increment to earnings entitlement in connection with rates would not, of course, represent an actual benefit to the utility until after a rate proceeding had developed wherein the rate base and rate entitlement became of practical importance.

In one case, where, to the writer's knowledge, interest during construction was capitalized with respect to meters and transformers carried in inventory, this treatment was approved by the utility's independent auditors. There would seem no reason why this treatment should not receive similar approval in other cases.

Another Accounting Technique

ANOTHER item which can swell the income account legitimately is a charge to the cost of issuing securities of the time spent by utility executives on financ-

ing. While the Uniform System of Accounts does not expressly provide for this treatment, it has been employed, to the writer's knowledge, in at least one case, with the approval of the independent auditors and without objection by the regulatory body having jurisdiction. This accounting technique seems amply warranted when considered in relation to other permitted accounting methods. Under this treatment the portion of the executives' salaries representing time spent on financing is added either to "Unamortized Debt Discount and Expense" (if the time is spent in connection with the issuance of funded debt), or to "Capital Stock Expense" (where the time spent relates to the issuance of capital stock, either preferred or common). The above entitled accounts are stated in the uniform systems as including all expenses "in connection with" or "associated with" the issuance of the securities in question.

UTILITIES with reasonably active and continuous expansion (which means by far the greater number) require that a substantial amount of time of their executives be spent in relation to the issuance of securities. The amounts so charged to securities issue cost would represent the portion of the salary of each executive represented by the proportion of his time spent on financing, according to periodic time sheet records. These records would show the particular security in connection with the issuance of which the time was spent, so that the charge could be added to the proper security account; *i.e.*, bonds, debentures, preferred stock, or common stock, as the case might be.

A reasonable interpretation of the defi-

HOW NEW ACCOUNTING TECHNIQUES CAN IMPROVE EARNINGS



nitions of the items to be included in the pertinent accounts makes it seem logical that the time of executives spent in relation to the issuance of securities should be charged to the cost thereof.

WHERE such treatment is employed, a further question arises; namely, whether the company is entitled to deduct, for income tax purposes, the entire salaries of the executives involved, including the portion thereof charged to the cost of issuing securities, or only the portion of the salaries charged on the books to operating expense. It is not believed that there are either regulations or court cases dealing with this question, but there have been court decisions relating to a reasonably analogous situation; *i.e.*, the matter of charging to the cost of property additions the time spent by executives in relation to the construction thereof. This leads to another thought; namely, that the principle of charging time spent on financing to cost of securities might be extended beyond executives to include time spent by other employees. The writer does not know of any case where this was done nor does it seem likely that the amounts

involved would be sufficient to warrant such extension. However, as a matter of principle it would seem logical and therefore capable of use by any utility which believed a benefit might be derived by so doing.

THE decisions in the case of full deduction of salaries where a portion of the time had been spent on construction was limited to officers of the company and held that where there was evidence that the officers would have been employed at the same salary even if construction had not been going on, then the full amount of salary was deductible for income tax purposes. It would certainly seem reasonable to extend this principle to executives where the portions of their time spent on financing would seem to create a benefit sufficient to justify the time and trouble incident to the accounting involved.

Capital Stock Expense

UNAMORTIZED debt discount and expense must be amortized in equal annual instalments over the life of the funded debt involved, but capital stock

PUBLIC UTILITIES FORTNIGHTLY

expense, either with respect to preferred or common stock, need not be amortized or written off over any period but is to be eliminated from the accounts as the stock to which the expense relates is retired. Until retirement, such capital stock expense may be carried on the books indefinitely. If the company should elect to write off such expense prior to retirement of the stock the charge is made to earned surplus so that income is not affected thereby.

THE reduction in operating expense arising from charging to cost of financing the portion of the time of executives spent in connection with the issuance of securities will be offset, in part, by the amortization of the debt expense. It is somewhat difficult to estimate a proper division of the time of executives spent on security issues as between funded debt and capital stock.

The amounts of these securities issued from year to year will necessarily vary, both in the same utility and as between different utilities. It is probable that the average expanding utility will have more funded debt issues than capital stock issues. On the other hand, it is likely that a greater amount of time will be spent by executives on each issue of common stock than in the case of an issue of bonds. An expanding utility will usually issue additional common stock at fairly frequent intervals, although not as often as bonds. It might not be unreasonable, on a long-range basis, to assume that the average annual division between time spent on funded debt and on the issuance of capital stock is about 50-50, although this rough average may vary greatly between individual companies.

LET us assume a utility with \$200 million of net assets, expanding at or beyond the average annual rate. What portion of its executives' salaries is likely to be chargeable to financing? Total executive salaries of \$160,000 annually might not be unreasonable in this case, nor would 25 per cent thereof seem an unreasonable average portion of such salaries applicable to the issuance of securities. Breaking down the \$40,000 so arrived at among the particular officers, a situation might be imagined where the chief executive received \$50,000 a year, of which \$5,000, or 10 per cent, was applicable to security issues; where there was a chief financial executive receiving \$30,000 a year, of which \$20,000 would apply to securities; where the treasurer received \$20,000 a year, with \$5,000 allocated to financing; and where the assistant to the financial executive got \$15,000 with \$10,000 thereof attributable to the cost of bonds and stock. This would aggregate the same annual overall total of \$40,000 referred to above. These figures would all represent assumed annual averages which might vary materially from year to year. But, since the expansion is deemed to be annually recurring, it is not improper to consider the matter on a long-range basis with the annual average controlling.

Annual Amortization

ON the above basis, net income would be increased by \$40,000 annually through this accounting treatment, assuming the utility was successful in deducting the entire salaries of the executives affected for income tax purposes. If the company is unsuccessful in this, then the annual increment to net income,

HOW NEW ACCOUNTING TECHNIQUES CAN IMPROVE EARNINGS

based on today's tax rate, would approximate \$20,000. On the above assumption of a 50-50 division between executives' salaries related to the issuance of funded debt and capital stock, respectively, there would be deducted from either of the two above figures, annual amortization on \$20,000 of additional funded debt expense. With an assumed 30-year life for such funded debt (the customary maturity for current issues of first mortgage bonds), the annual amortization would amount to \$667.

By reason of annually recurring bond issues, such amortization would, by the end of ten years, have increased to an annual total of \$6,667. This would reduce the above amounts of increased net income from the suggested accounting treatment of executives' time devoted to financing to an increase in average annual common stock earnings of either \$33,333 or \$13,333, as the case may be for the tenth year after adoption of this treatment. The annual average for the increment to net income during the ten-year period would be either \$36,667 or \$16,667.

ASSUMING adoption of both the above suggested accounting treatments, what would the utility stand to gain in terms of increased common stock earnings? By capitalizing interest during construction with respect to meters, transformers, and similar items carried in inventory, utilities of the size used in the above example might, as stated above, expect an increment to common stock earnings at an annual average rate of \$20,000 for the first ten years after adopting the treatment. For the ten-year period this would aggregate \$200,000.

By charging to the cost of issuing securities the portion of the executives' salaries attributable to financing, utilities conforming to the above example might expect an annual increase in common stock income at an average rate of either \$36,667 or \$16,667 for the ten years following adoption of this treatment, depending on whether the utility was successful in deducting, for income tax purposes, the full salaries of the executives involved. This would add up to totals of \$367,000 or \$167,000 for this ten-year period.

BASED upon acceptance of both the proposed treatments, average annual increment to net income for the first ten years would total either \$57,000 or \$37,000, depending on the deductibility for taxes of the full salaries of executives.

The ten-year totals would then accumulate to \$570,000 or \$370,000, as the case might be. A utility, such as assumed herein, might be expected to have about \$75 million of common stock equity, with earnings thereon around \$8.5 million annually. The foregoing esti-



PUBLIC UTILITIES FORTNIGHTLY

mate of average annually increased common stock earnings for the ten years succeeding adoption of the proposed methods would work out for the total of both suggested treatments to about either 0.7 per cent or about 0.45 per cent of total net income, depending on the income tax treatment of the second item, as above explained.

WHILE the results of adopting the suggested treatments may seem meager when viewed as a percentage of increase in the total net income, the dollar amounts of increased annual income, particularly when effect is given to these

benefits over a considerable number of years, seem sufficient to warrant careful consideration of the points raised. With a utility expanding at or above the average annual rate, the benefits to income from both of the suggestions may properly be considered as annually recurring for as long as this rate of expansion continues.

Obviously, utilities which are of larger size than that used in the above examples could expect an increase in the benefits derived from adopting the proposed accounting treatments, though not necessarily in direct proportion to the difference in size.

Burying the Russians (in Consumer Goods)

"WE still have a very high component of free private enterprise in our so-called 'mixed economy.' But within the apparent confusion of this mixed economy, there is a wide range of governmental and private, official and unofficial, and even clandestine, groups which formulate the plans which increase our efficiency and avert chaos.

"Under the Soviet system, the planning is done from the top, and it is done with no real reference to the human needs of private individuals . . .

"Our capital-generating capacity, though smaller than that of the Russians in percentage, is much larger in terms of actual increments. We have an enormous capacity to generate capital—so big that we cannot use it all. But instead of investing wisely in the emerging nations of the world, we content ourselves with largely ineffectual programs of military, political, and financial aid.

"It is not assistance that is called for; it is investment. It is not imperialist investment and exploitation that is called for; it is investment in the education and growing independence of the emerging nations, as well as in their resources, that is called for. . . .

"Unless we rethink our rôle and recast our strategy, the crisis will deepen from day to day until it overwhelms us. But if we look calmly at the facts of the crisis, and if we perceive correctly what is implied in the alternative which is being offered to the world of compulsory capital generation and planning or voluntary capital generation and planning, and if we use our own immense capacity for generating capital and using the capital we have, I think we may yet bury Mr. Khrushchev's grandchildren—in consumer goods, of course."

—JOHN R. DUNNING,
Dean, Columbia University, School
of Engineering.

How Do Utility Earnings Grow?



This article is a sequel to a recent contribution to the **FORT-NIGHTLY**, entitled "Price-earnings: Price-dividends?" in which this author examined the influence of earnings and dividends on the common stock prices of investor-owned utilities. This article provides probable results of the theories advanced in the initial discussion by applying the ideas to the operation of an hypothetical electric power company.

By M. RICHARD SUSSMAN*

ALTHOUGH the concept of growth as related to common stocks no longer appears to consume the imagination of the market place, it has by no means disappeared from the investment scene. This is evidenced by the compilations on growth stocks recently reported by a prominent financial publishing service.

Perhaps it might be said that growth and glamour are now being viewed with a more rational perspective. Nevertheless, the problem of recognizing growth, un-

covering its causes, and foreseeing its influences has become no less acute.

One area in which growth exerts a significant influence, is that concerned with the relationship of common stock prices to dividends and to earnings. It has been suggested that these relationships should be examined in view of the characteristics of the companies being studied.

Each company should be considered in light of its earnings per share and the changes in these earnings. If earnings have increased, have the increases been of significant amounts? The sources of earnings increases should be

*Assistant professor of finance, The Pennsylvania State University, University Park, Pennsylvania. For additional personal note, see "Pages with the Editors."

PUBLIC UTILITIES FORTNIGHTLY

examined to determine whether they were of a nonrecurring or undependable nature.¹

IT also has been suggested that four general methods appear to be prevalent in causing earnings per share to increase: (1) improving operating results; (2) improving financial leverage; (3) retaining earnings; and (4) issuing new common shares at a "low cost."² However, these suggestions lack one important clarification; that is, how they can be implemented. Can these causes of changes in per share earnings be specifically isolated, and, if so, how is it done?

The answer to this question is, "Yes, it can be done," and this article offers one method of how.

The key to this method is isolation by control. The influence of a particular force is isolated by controlling the other factors which might be at work. Having determined the results of this particular force, it is kept constant and another influence is brought into focus. As an end product, portions of the total change in per share earnings can be specifically allocated to their causal factors.

Changes in Operating Efficiency

BEFORE the influence of a change in operating efficiency can be determined, some measure of operating efficiency must be decided upon. One measure often suggested is the relationship between profit and revenue. The reasoning being that this relationship indicates a company's ability to control relative expenses.

¹ "Price-earnings: Price-dividends?" by M. Richard Sussman, *PUBLIC UTILITIES FORTNIGHTLY*, July 20, 1961, Vol. 68, No. 2, p. 102.

² *Ibid.*, p. 100.

However, this measure examines just half of the problem, as it does not consider the funds with which management worked. It does not indicate how efficiently these funds were used.

Another measure of efficiency, and the one this author adopts, is the relationship between earnings before interest but after taxes, to long-term invested capital. In addition to bringing into consideration the efficiency with which invested capital is used, this measure also has a particular advantage when applied to public utility companies. In the absence of specific knowledge concerning a company's regulatory rate base, long-term invested capital may suffice as a reasonable substitute. Thus the relationship of these earnings to long-term invested capital may also be considered as an approximation of the return the company is earning on its rate base.

CHANGES in operating efficiency are not usually directly reflected in per share earnings. Rather, they are passed through the filter of the capital structure which may add to, or subtract from, them. In order to isolate the effect of a change in operating efficiency, the capital structure and its related influences must be held constant. One of the many ways in which this can be accomplished is illustrated by the following question: "What would earnings per share have been last year had the company operated with this year's efficiency?"

The difference between the per share earnings thus computed and the per share earnings actually reported would be entirely due to changes in operating efficiency.

HOW DO UTILITY EARNINGS GROW?



FOR example, consider the case of the hypothetical Pennhio Electric Company:

PENNHIO ELECTRIC COMPANY

	<i>This Year</i>	<i>Last Year</i>
3% Bonds	\$ 6,000	\$ 4,000
4% Pfd. Stock	2,000	2,000
Common Stock (\$10 par)	3,000	2,000
Paid in Surplus	2,000	—
Retained Earnings	3,000	2,000
	<hr/> \$16,000	<hr/> \$10,000

Earnings on Invested Capital	\$ 2,400	\$ 1,000
% Return on Invested Capital	15%	10%
Earnings to Common Stock	\$ 2,140	\$ 800
Common Shares	300	200
Earnings Per Share ...	\$7.13	\$4.00

This year's efficiency 15% \times last year's capital \$10,000 = \$1,500
 Less last year's interest and preferred dividends: 200

Divided by last year's shares; 200: \$1,300

Equals earnings per share with this year's efficiency: \$6.50

Less actual earnings per share: 4.00

Change due to improvement in operating efficiency: \$2.50

Changes in Financial Leverage

FINANCIAL leverage is the influence of fixed payment capital and its charges, upon the return to common stock equity.

However, this influence also may not be directly reflected in per share earnings. Rather, it may be modified by a substantive alteration in the relative composition of the equity. In order to isolate the effect of a change in financial leverage, the relative composition of the common stock equity must be held constant. This can be achieved by answering the question: "What would this year's earnings per share be if per share book value had not changed?" The difference between the earnings thus computed and last year's earnings, "had the company operated with this year's efficiency," can be directly attributed to a change in financial leverage.

TO illustrate, again consider the Pennhio Electric Company:

Last year's common stock equity	\$4,000
Last year's common shares	200
Book value per share	\$20
The year's common stock equity	\$8,000
Divided by \$20 = shares this year	400
if book value unchanged:	400
This year's earnings to common stock	\$2,140
Divided by 400 =	\$5.35
Less last year's earnings with this year's efficiency:	6.50

Decrease due to change in financial leverage: (\$1.15)

PUBLIC UTILITIES FORTNIGHTLY

By holding constant the operating efficiency and the relative composition of the common stock equity, the influence of the change in financial leverage has been brought into focus.

Changes in Retained Earnings

SUBSTANTIVE changes in the relative composition of common stock equity are usually a result of two causes: (1) a change in retained earnings; and (2) the issuance of new shares "away from" book value, by means other than stock splits or stock dividends. As with the previous factors, the influence of one can be ascertained by controlling the influence of the others.

To isolate the influence of a change in retained earnings, the question is: "What would this year's earnings per share be if any new shares had been issued at book value and retained earnings had not changed?" The earnings thus computed are compared to the per share earnings resulting from changes in operating efficiency and financial leverage. Any difference produced can be attributed to the one changing factor—retained earnings.

Pennhio Electric Company would produce the following results:

This year's common stock equity less increase in retained earnings	\$7,000
Divided by \$20 book value = shares this year if new shares had been issued at book value and retained earnings had not changed:	350
This year's common stock earnings	\$2,140
Divided by 350 shares per above	\$6.11
Less earnings resulting from changes in operating efficiency and financial leverage	5.35
Increase due to change in retained earnings	\$0.76

Issuance of New Shares "Away from" Book Value

THE procedure for determining the influence of this last factor is quite simple. It is the difference between the results produced by the other factors and the earnings per share actually reported.

Applying this procedure to the Pennhio Electric Company and summarizing:

Per share earnings as reported this year	\$7.13
Less earnings as a result of the previously considered factors	6.11
Increase due to issuance of new shares	\$1.02
<i>Summary</i>	
This year's earnings per share	\$7.13
Last year's earnings per share	4.00
Change	\$3.13
Change in operating efficiency	\$2.50
Change in financial leverage	(1.15)
Change in retained earnings	0.76
Issuance of new shares	1.02
Total	\$3.13

THE foregoing method is not presented with the thought that it should be rigidly adhered to. On the contrary, it is suggested as a way of thinking into which qualitative and quantitative adjustments can be fitted. Considerations of depreciation methods, interest charged to construction, nonrecurring income, and similar items can easily be incorporated. In addition, it is recognized that an intensive examination of the reasons for changes in operating efficiency and the other factors is necessary for a complete analysis. Nevertheless, the method as presented does isolate the general causes of a change in reported per share earnings; an earnings figure which the general public observes.

Washington and the Utilities

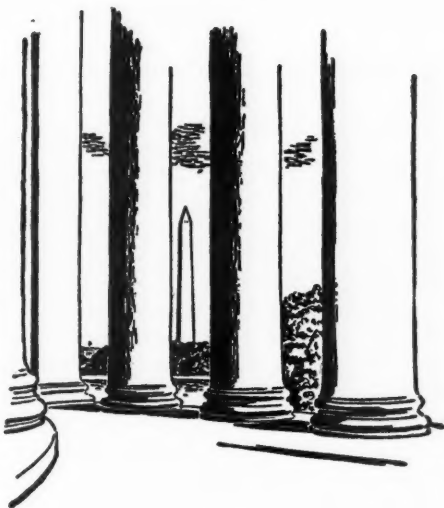
Circuit Court Upholds FPC's Gas Area Price Policy

APPROVAL of the new area pricing system for regulating natural gas, which is being given a trial by the Federal Power Commission, came late last month in a decision handed down by the U. S. court of appeals for the District of Columbia circuit.

In a two-to-one decision, the court said that the FPC could abandon the normal utility-type rate making based on return on investments and, instead, could employ the area pricing formula first proposed last year by former FPC Chairman Kuykendall.

The area pricing formula, when in force, will see prescribed rate schedules set for each of 23 producing areas throughout the country. There will be a floor and a ceiling for each area, and all producers in such a region will have their rates determined on this area basis. In most cases, the commission has said it will propose one rate for new contracts and another for rate increases.

In the opinion, written by Circuit Judge Prettyman, in which Judge Danaher concurred, the court found nothing



ing illegal or unconstitutional about the commission's action. Judge Fahy wrote a separate dissenting opinion.

The FPC had contended the area pricing schedule "is only for guidance and does not constitute any determination of just and reasonable rates and will not foreclose any person from justifying a particular rate in any area."

UNDER the area pricing structure, a natural gas producer, simply by application, will receive his rate increase if it is within the limits of the previously determined rate for that particular area. If this proposed rate is beyond the area rate limit, he must file for a hearing before the commission.

At the time the FPC announced the institution of the area price policy, it had 3,372 independent producer rate cases on file. On October 31st, the commission had before it 6,948 producer rate cases.

It was this seemingly insurmountable backlog of individual rate case filings which caused Kuykendall, and his successor, Chairman Swidler, to look upon the area pricing system as the only way in which the FPC could develop any prac-

PUBLIC UTILITIES FORTNIGHTLY

tical regulation for the natural gas industry.

Judge Prettyman said:

If, as some consumer interests fear, the new process turns out to be ineffective in the protection of their interests, the way is open for them to challenge the results. . . . Let us emphasize that we do not have before us at this time the question whether any rate set by the commission as a guide rate falls within the area of reasonable computation. That question is emphatically left open by the commission, and by us, for consideration when some one or more of the selected guide rates is attacked, by a producer, a customer, or a consumer.

He pointed out that "the problem here at this time is merely whether the commission may embark upon this method of regulation. Since it is the commission's judgment that this method is best suited for the regulation of these prices . . . we find in the statute nothing to deny a trial of the method."

JUDGE Prettyman also explained that, under the powers given it by the Congress to regulate natural gas, the FPC can adopt "upon the basis of its own expertise and its files, without a record made in the open in respect to the specific subject matter in issue, and without hearing," a set of guide lines by which it will be controlled in exercising its regulatory functions during an interim period while it is attempting to perfect a suitable system for permanent gas regulation.

Since announcing the new procedure in September, 1960, the Federal Power Commission has used it to dispose of some rate cases on the assumption it would be affirmed in the courts.

The commission has ordered investigations to determine rates for two gas-

producing areas, southern Louisiana, and the Permian basin in west Texas and New Mexico. Although the agency published area rates when it announced the new method, it has acknowledged that those prices may need revision.

The commission adopted the area rate method because determining investment return for each producer took too long, thus contributing to a growing backlog of pending rate increase applications. The backlog has continued to increase in the past year. But officials believe the number of pending cases would have increased even more without the area price method.

REA Spells Out Electric Power Loan Requirements

A LISTING of certain basic requirements for financing additional generating capacity on the Upper Missouri river basin has been set forth by the Rural Electrification Administration.

REA Administrator Clapp late last month spelled out the requirements which REA loan applicants would have to follow in a letter to the presidents of two groups of REA borrowers in the Missouri basin.

Clapp said that REA borrowers in the area, which includes North Dakota, South Dakota, and parts of Minnesota, Iowa, and Montana, should think in terms of larger electric generating plants. He specifically suggested a 200,000-kilowatt capacity lignite-and-steam generating plant near Garrison dam, North Dakota. The completed plant was expected to cost in the neighborhood of \$50 million.

It was believed Clapp was trying to spell out the following line of reasoning: (1) The country's electric power needs were going to grow in the years to come;

WASHINGTON AND THE UTILITIES

(2) therefore, power companies should look to the future and build larger generating plants; and (3) since the REA has money, why not borrow from it to finance new power projects.

In his letter to Luverne Splickan, president of the Lignite Electric Co-operative, Inc., of Edgeley, North Dakota, and Arthur Jones, president of the Basin Electric Co-operative Corporation of Bitton, South Dakota, Clapp said that the new electric generating capacity was needed to avert a possible power shortage in late 1965 when the Upper Missouri river basin dams of the U. S. Bureau of Reclamation will no longer supply enough energy to meet rising demands on co-operative systems.

IN view of the fact that REA has received various proposals for meeting the future power needs of borrowers in the area, Clapp said he hopes his department's new requirements would serve as the basis "for a reappraisal of the loan applications already submitted and possibly new or amended applications which will have the unified support of the rural electric groups in that entire region . . ."

In addition to recommending a single-unit 200,000-kilowatt plant in North Dakota, Clapp also set forth these requirements: (1) Any new generating capacity financed by REA in the area would have to be justified by the early needs of REA borrowers; (2) the REA will not finance the construction of transmission lines which duplicate usable Reclamation Bureau facilities; (3) power generated by the proposed plant would have to be distributed over as wide an area as practical; (4) all co-operatives benefiting from the plant should participate in ownership and control of it.

Clapp said these requirements would be in addition to the REA's usual legal and feasibility requirements and that no

single plan now under study is completely satisfactory.

Interior Qualifies "Death of Partnership" Statement

THE administration, which early in November insinuated that the policy of "partnership" between the federal government and investor-owned utilities had been completely discarded, later in the month seemed to back away from the indication the policy was dead and buried.

Interior Assistant Secretary Holum, several weeks ago, said in a speech before a meeting of the National Rural Electric Co-operative Association in Sacramento, California, that the partnership policy initiated during the Eisenhower administration had come to an end. His exact words were: "Partnership which proposes to sell falling water to profit utilities at federal projects ceased to exist as a national policy on January 20th" (Inauguration Day).

However, shortly thereafter, Holum said that this statement, and the speech in general, had been misinterpreted. He said the Kennedy administration had no intention of squeezing electric utilities but only plans to lead the way itself in water resources development. The federal government was not bent on throttling private enterprise, he added. In fact, the power industry itself must start to increase its sources of power. The electric utility industry should look toward tripling its installed capacity by 1980 if requirements for economic growth are to be met, the Interior Department official said.

"THE administration will lead a program of sound multipurpose resource development and management,"

PUBLIC UTILITIES FORTNIGHTLY

he continued. The Interior Department was seeking to enlist utility companies in a study of nation-wide transmission systems, Holum explained. Already under way are studies of proposals to tie in federal transmission systems serving the Pacific Northwest, California, the Upper Colorado river project, and others. Holum, in a speech before an NRECA regional meeting at Hollywood, Florida, also specifically mentioned possible interties between the Southwestern Power Administration and the Bureau of Reclamation's Missouri river basin system, and between the SPA and the Southeastern Power Administration. He said the decision on which studies would be made first would follow final assembly of load and resource data by the federal power marketing agencies.

Interior Secretary Udall has also stressed the importance of resources development in recent speeches and statements. Speaking at a White House regional conference in Denver, he said that if our nation's resources are to continue to meet the needs of a growing population, prompt advance planning is essential.

Government Reports Deficit in Columbia Basin Project

THE General Accounting Office has submitted to Congress a report which contends the federally owned Columbia river power project lost \$14.2 million in the 1961 fiscal year ending June 30th. The GAO said the Pacific Northwest system lost about \$10.7 million in fiscal 1960, but that the difference between the two years was greater than \$3.5 million. The auditors said in fiscal 1960 there were nonrecurring expenses of \$2.2 million, making the increased net loss between the two years \$5.7 million.

The report stated the larger loss was caused by increases in operating and interest expenses and decreases in operating revenues.

Attempt Compromise over Nuclear War Warning Unit

THE federal government is making another attempt to resolve the squabble over who is going to pay for the National Emergency Alarm Repeater (NEAR) system. Original plans were for the federal government to absorb the cost of transmitting equipment and the public paying for the receivers. The Defense Department, however, suggested that utility companies pay for the transmitters and receivers, with reimbursement made over a period of years, via amortization of such expenses as approved by state regulatory agencies. This approach would allow slight rate increases where necessary to cover the amortization costs.

Electric utility companies, especially those under public ownership, have protested against this plan as being too great a burden for them to assume. Such objections have temporarily caused the administration to back away from its original suggestion of financing through the utility companies and try a tristate pilot plan instead. The government has been negotiating with three states—Georgia, California, and Wisconsin—to institute pilot programs under which local power companies would be responsible for the initial financing and in which part of the cost would then be passed on to the homeowner in the form of increased power rates. By this program the government hopes to find out if the bearing of the cost by private utilities would cause them undue hardships.

Telephone and Telegraph



Kerr Bill Would Make Space Relays Private Business

SENATOR KERR (Democrat, Oklahoma) announced on November 27th that he will introduce legislation to authorize private ownership of the U. S. portion of the proposed world-wide communications satellite system. Senator Kerr is chairman of the Senate Space Committee. He said his group will start hearings on the measure soon after Congress reconvenes on January 10th.

The bill would give the Federal Communications Commission authority to determine which communications companies would share in the ownership of the U. S. portion of the system. The FCC, which would assign frequencies, has under consideration now a plan to let a nonprofit company develop and operate the system for international telephone calls and eventually for international television. This has provoked a hot dispute within the communications industry and the government over whether such a system should be a private enterprise or a public undertaking.

The House Science and Astronautics Committee conducted a nine-month study earlier this year into the question. It concluded that the question of public or private ownership should be answered after

a host of other issues have been resolved. But it urged that this nation be first with such a system.

The Kerr Bill would create the "Satellite Communications Corporation" with an authorized capital stock of \$500 million in 5,000 shares which the participating companies would buy. It could not be transferred without approval of the FCC. The legislation would require the corporation to purchase rockets, launching devices, and other services from the National Aeronautics and Space Administration. Under the legislation, the corporation would make its facilities available at rates to be established by the FCC.

NASA to Get More Funds for Satellites

THE administration plans to double the civilian space budget of the National Aeronautics and Space Administration, the governmental agency in charge of America's space communications plans. The budget to be submitted to Congress in January will probably call for \$3.7 billion, and perhaps as much as \$4.2 billion, as compared with last year's budget of \$1,671,800,000. Though the majority of the funds are earmarked for development of equipment to place a man on the

PUBLIC UTILITIES FORTNIGHTLY

moon, it seems likely that all NASA projects, including space communications satellites, will benefit from the larger appropriations.

The Army has announced that its Advent space communications satellite will be flight tested within twelve months. It is designed to relay messages, such as telephone conversations, back to earth.

The expanded space budget would be the second big instalment on the program announced last spring by President Kennedy of achieving leadership in space exploration and being first to land a man on the moon. The President reaffirmed his commitment to this objective last month in making public an executive order suspending the eight-hour limitation on the workday of certain construction workers employed by the space agency.

The order, which according to the agency applies to fewer than one hundred workers, was more significant for its policy declaration than its effect. The order declared that "a clearly leading rôle in aeronautical and space achievement has become a vital national objective" and said that it was "essential" to conduct the space program "with a major national commitment of man power, material, and facilities" and "with all possible speed and efficiency."

As the program expands, however, it is becoming caught between the desire to achieve leadership in space and the balanced budget, which President Kennedy has promised to present to Congress in January, barring unforeseen military needs. In some ways, therefore, the space program is tangled up in the same budgetary conflict that prevailed when the Eisenhower administration was frequently accused by congressional Democrats of subordinating space supremacy to fiscal considerations.

DECEMBER 21, 1961

The principal difference, in the opinion of administration officials, is that President Kennedy is firmly pledged to attain space leadership, while former President Eisenhower was never convinced space exploration had overriding importance. The new space budget is being drafted to meet the objective of landing a manned expedition on the moon in the current decade. Much of the increased budget would go for development of the capsules and rockets to carry a three-man expedition to the moon.

Telephone Engineers Hear About REA

RICHARD A. DELL, Deputy Administrator of REA, on November 30th told a telephone technical symposium at Minneapolis that "the design of modern telephone systems for the special needs of rural subscribers was a relatively unexplored field of enterprise" until REA entered the picture. He pointed out that since 1957 REA borrower systems have been moving rapidly toward all-buried outside telephone plant for which loans made up about 3 per cent of total loans in the fiscal year 1959. In the following year, buried plant loans jumped to nearly 25 per cent. And in the year ending June 30, 1961, buried plant accounted for almost half the total outside plant.

Mr. Dell referred to tests on long-span construction as suggesting substantial savings in construction and maintenance cost. He said REA-financed systems have a reputation for being well designed and well built, and that the engineering profession can take "a deserved bow for low-cost, efficient, trouble-free, all-dial rural telephone service"—rapidly becoming the model for telephone plant outside the cities and suburban areas.

The REA Deputy Administrator fore-

TELEPHONE AND TELEGRAPH

saw a tremendous future in "rural telecommunications." He said that the REA rural telephone law was not primarily designed to benefit the telephone industry, although it has done that. He referred to the large-sized job still remaining in the area of rural telephone loans. There are 500 to 1,000 farms without telephones in 462 counties, 1,000 to 2,000 farms without telephones in 233 counties, and more than 2,000 farms without telephones in 45 counties. The overall picture, however, according to Mr. Dell, shows that somewhere around 65 per cent of the farms have telephones, of which one-half to two-thirds are dial.

U. S. Offers to Share Space Communications Data

THE United States, at the United Nations in New York on November 27th, proposed a plan as a first step toward insuring that the exploration of space would be used for the betterment of man, not for his destruction. The proposed plan called attention to the possibilities of gaining new insight into the mysteries of the weather through a series of meteorological satellites and of improving international understanding through a network of communications satellites.

The vital rôle the United Nations could play in helping the world to share in the study of space and the benefits from the discoveries, however modest their scientific or economic development, was stressed in part of the plan. Charles W. Yost put the United States program before the United Nations Committee on the Peaceful Uses of Outer Space in an apparent search for a new sense of co-

operation between the Communist and western worlds.

The Soviet Union, ignoring the United States plan, quickly indicated that the United Nations would have little opportunity to influence any space activities unless it did so on Moscow's terms. The meeting was the first for the 24-nation committee. Formed nearly two years ago at the unanimous recommendation of the General Assembly, the committee had been trying unsuccessfully to convene in the face of a Soviet boycott and Soviet attacks on its purposes and structure.

THE United States plan, as Mr. Yost presented it, would do the following: (1) It would acknowledge that the international law and the United Nations charter "extend to the outer limits of space explorations." (2) It would have the United Nations Secretary General establish "a central registry of space vehicles," maintaining a record on all space launchings and transmitting data to members at their request. (3) It would use meteorological satellites to gain "substantial progress in the atmospheric sciences and in weather analysis and forecasting," have the world meteorological organization study the best ways to use them and insure the transmission of the satellite data to the world's countries through regional meteorological centers. (4) It would use communications satellites as orbiting relay points to form a global network available to all nations, ask the International Telecommunication Union to consider at its 1963 space conference "those aspects and give special attention to help needy countries develop the facilities for making use of the new network."



Financial News and Comment

By OWEN ELY

Examiner Rules That FPC Cannot Regulate Form and Content of Stockholders' Report

FPC Presiding Examiner Samuel Binder on November 3rd filed an 88-page decision finding that the FPC had never prescribed in any way the form and content of annual stockholders' reports of Appalachian Power (American Electric Power System) or of any other public utility or licensee subject to its jurisdiction. Examiner Binder overruled the staff position on this point and determined that no FPC rule or regulation required that such stockholders' reports be appended to the annual FPC report Form No. 1. In addition, he determined incidentally that FPC Form No. 5 (monthly statement of operating revenue and income) had never been authorized by the FPC and its filing therefore was also not obligatory.

The decision found that Appalachian is violating FPC accounting and reporting requirements with respect to deferred taxes resulting from the use of liberalized depreciation and accelerated amortization as purportedly required by the commission's Order Nos. 204 and 216. Appalachian had consistently taken the position that Order No. 204 had afforded it an option for FPC purposes and that it

could exercise this option and use flow through for FPC purposes while using deferred income tax accounting where required by state regulatory commissions.

THE examiner took the view that Order No. 216 interpreted Order No. 204 and barred the construction of the latter order as being optional. Appalachian contended that Order No. 216 was invalid in that it was not interpretive, but amended Order No. 204 and was invalidly promulgated. The examiner stated that the validity of Order No. 216 was a matter that he did not have the power to pass on but was for the commission itself.

DEPARTMENT INDEX

	Page
FPC Examiner Rules That FPC Cannot Regulate Form and Content of Stockholders' Report	976
Pipeline Rate Case Backlog Still Very Heavy	977
Chart—Range of Yields on Utility Securities 1910-61	978
Congress to Get Bill on Project for Communications Satellites	979
Electric and Gas Utility Security Offerings in November-December	980
Recent Utility Brochures by Wall Street Firms	981
Natural Gas Proportion of Total Energy Expected to Increase to 35 Per Cent	982
Table—Financial Data on Electric Utility Stocks	982, 983, 984

FINANCIAL NEWS AND COMMENT

He further stated that Appalachian's lack of compliance with the orders was not a willful or knowing violation since it had followed an accounting practice which it had consistently maintained was permitted under the applicable FPC regulations.

Both the company and the staff will have an opportunity to file exceptions to the examiner's decision, which will then be subject to review by the commission.

THE decision of the examiner as to form and content of annual reports is most important in that a number of utilities have been involved in the same issue as Appalachian, although it is understood that several of such companies have accepted FPC jurisdiction and made the balance sheet changes requested by the commission. Among those which are currently opposing FPC jurisdiction and against which show-cause orders have been issued are: Atlantic City Electric, Pennsylvania Electric (General Public Utilities System), Virginia Electric & Power, New York State Electric & Gas, Central Hudson Gas & Electric, and Portland General Electric.

The eventual outcome of this question will be of considerable interest to the utility industry and its accountants. At the present time, there are at least six different methods of treating deferred taxes in the balance sheet and there have been a number of legal actions and conflicting decisions by the various state and federal commissions having jurisdiction, as well as the courts. Some state and federal commission orders have been in conflict with others, thus raising questions of paramount jurisdiction. However, if the continuing trend toward use of flow through eventually results in a great majority of the utility companies using this practice, the problem will be solved auto-

matically for these companies, since the amount of the current tax reductions will be included in earned surplus subject only to footnote explanation.

Pipeline Rate Case Backlog Still Very Heavy

DESPITE the apparent desire of the new administration to speed up the determination of rates for gas pipeline companies, *AGA Information Service* (November 24th issue) thinks the backlog of rate cases is still about as large as ever.

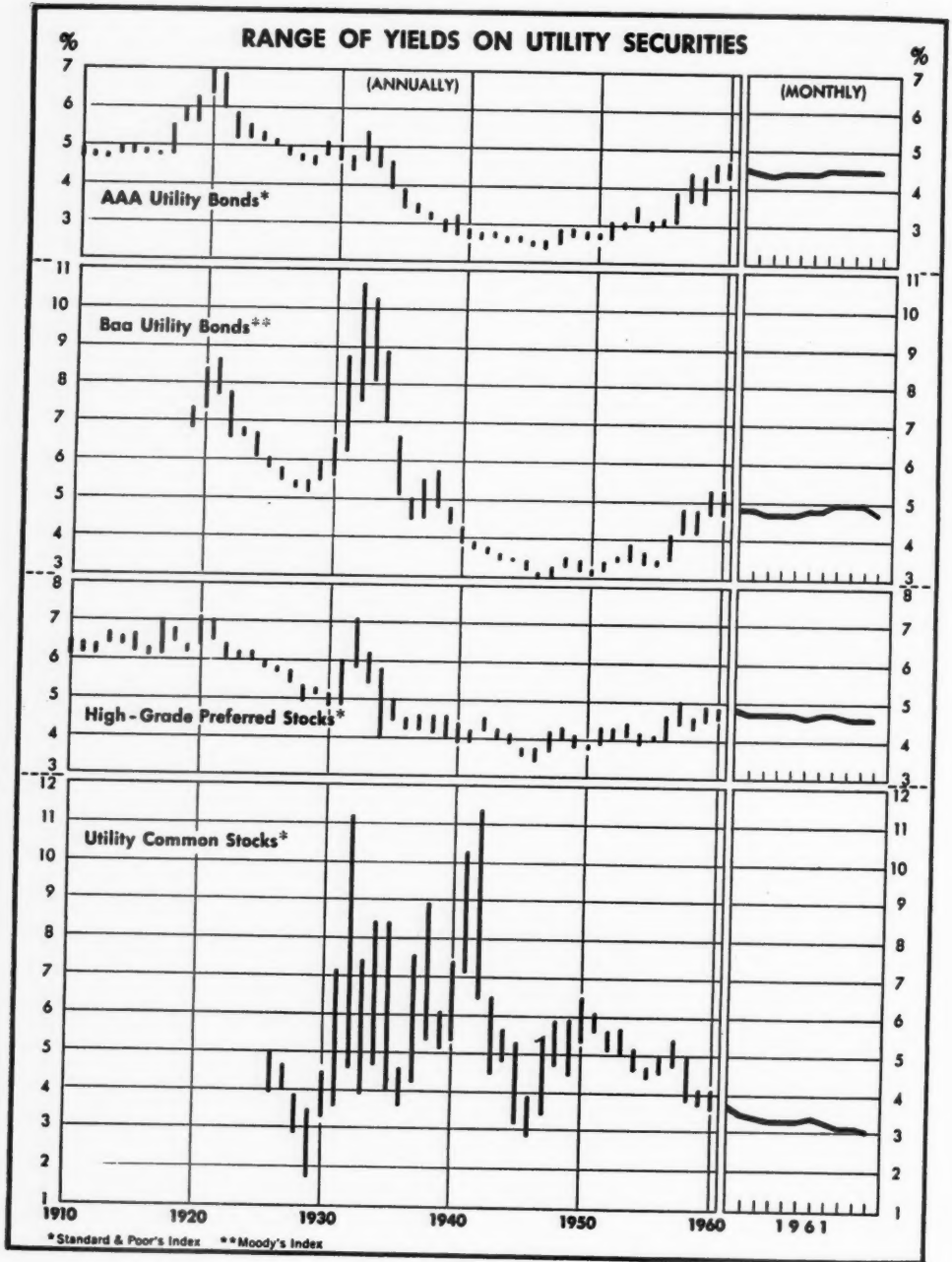
The publication comments:

The uncertainties pipeline companies encounter on knowing real earnings—uncertainties shared also by distributors—through delays in rate cases, everybody agrees is bad. AGA's Special Committee of Executives on Regulatory Affairs continues to wrestle with the basic causes of delay. The industry is entitled to good marks in its efforts to settle pipeline rate cases. Without such efforts the pipeline rate backlog might reach dangerous proportions.

The table on page 978 is condensed from the AGA table, showing in millions the rate increase totals for important cases (except where indeterminate) but omitting smaller totals. It would not be worth while to attempt to show an industry total, because of overlapping increases, etc. The figures do not, of course, include any amounts for compound interest, which in some cases might be very large in any eventual settlement.

In the original table, recent progress toward decisions was indicated by footnotes.

PUBLIC UTILITIES FORTNIGHTLY



FINANCIAL NEWS AND COMMENT

Congress to Get Bill on Project For Communications Satellites

THE present status of the communications satellite project was clarified in a recent address by Chairman Frederick R. Kappel of American Telephone and Telegraph before the Commonwealth Club of California in San Francisco. He pointed out that overseas communications have been increasing about 20 per cent a year or at the rate of 500 per cent in a decade. Hence, it is necessary to plan for a big increase in overseas communications channels of some kind.

Coaxial cables and microwave radio relay systems now provide thousands of long-distance channels on land, and later hollow pipes called "wave guides" will furnish hundreds of thousands of such channels. For overseas, however, telephone cable systems are being built (affording a more efficient and dependable method than the radiotelephone) but microwave towers or wave guide pipes are impracticable. Hence, the idea of a satellite system has been developed to

relay microwave signals overseas. This method would provide more channels faster and probably ultimately at less cost than would other overseas facilities, and it would also permit transmission of TV and other broad-band communications. The satellites would thus serve as an extension of the overland systems in this and other countries, linking them into a unified world system for commercial communications.

EXPERIMENTAL launchings of various types of communications satellites are being prepared for consummation in 1962; the administration's recent experiment with a package of needles, which worried the astronomers, seems to have gone awry. AT&T, under an agreement with NASA, is developing the first of its satellites at Bell Laboratories, and this is scheduled for experimental launching next spring.

Meanwhile, as indicated earlier in this department, a confused "hassle" developed regarding the ownership, physical

Company	Holding Company	Annual Amt. (Mill.) Of Total Increases	No. of Applications	Year of Earliest Application
Atlantic Seaboard	Columbia Gas System ..	\$ 3.8	1	1960
Cities Service Gas	Cities Service	14.5	2	1959
El Paso Natural Gas		84.2	7	1955
Hope Natural Gas	Consol. Nat. Gas	14.5	4	1954
Houston Texas Gas & Oil	Houston Corp.	1.3	1	1960
Lone Star Gas		1.3	1	1960
Michigan-Wisc. Pipeline	Amer. Nat. Gas	11.4	3	1957
Natural Gas Pipeline Co. of Amer.	Peoples Gas L. & C. ..	13.5	4	1959
New York Natural Gas	Consol. Nat. Gas	8.1	3	1959
Northern Natural Gas		24.6	5	1957
North Penn Gas		1.0	3	1957
Panhandle Eastern Pipe Line		35.0	5	1955
Southern Natural Gas		17.2	3	1959
Tennessee Gas Transmission		59.2	3	1957
Texas Gas Transmission		4.7	1	1961
Transcontinental Gas P. L.		11.8	1	1961
Trunkline Gas	Panhandle Eastern P. L.	14.6	2	1960
United Fuel Gas	Columbia Gas System ..	14.6	1	1960
United Gas Pipe Line	United Gas Corp.	49.8	1	1960
United Natural Gas	National Fuel Gas	1.7	7	1956

PUBLIC UTILITIES FORTNIGHTLY

setup, and operation of the proposed satellite system. With a world-wide system, as Mr. Kappel points out, probably less than half of the ownership would be held in the United States, since many foreign countries would also have substantial stakes in the enterprises. President Kennedy last summer indicated that, for the U. S. part of the system, he favored private ownership with public regulation.

The FCC directed a committee of representatives of the international carriers (the so-called Ad Hoc Commit-

tee) to prepare a plan and this was presented about mid-October, with recommendations which may be summarized as follows:

A NONPROFIT corporation is to be created to act for the United States communications companies and to develop, manage, and promote the use of communications satellites. Each carrier authorized by the FCC to provide services over the satellite system can be a joint owner and each owner will have two directors on the board of the satellite



ELECTRIC AND GAS UTILITY SECURITY OFFERINGS IN NOVEMBER-DECEMBER

Date	Amount (Mill.)	Description	Price To Public	Under- writing Spread	Offer- ing Yield	Aver. Yield for Securities Of Similar Quality	Moody Rating	Success Of Offer- ing
<i>Bonds and Debentures</i>								
11/2	\$10	Idaho Power 1st 4½s 1991	100.50	.94C	4.47%	4.49%	Aa	d
11/2	20	Northern Natural Gas 4½% S.F. Deb. 1981*	100.32	.85N	4.60	4.68	A	a
11/15	15	Rochester G. & E. 1st 4½s 1991	100.43	.73C	4.43	4.49	Aa	d
11/15	4	Wisconsin Michigan Power 1st (s.f.) 4½ 1991	102.75	.79C	4.58	4.68	A	d
11/16	15	Natural Gas Pipeline Deb. (s.f.) 4½ 1981*	99.00	1.13N	4.83	4.89	Baa	a
11/17	25	Carolina Power & Light 1st 4½s 1991*	100.49	.77C	4.47	4.49	Aa	d
11/22	60	Consolidated Edison 1st 4½ 1991*	102.05	.63C	4.50	4.49	Aa	d
11/22	35	Texas Eastern Trans. 1st (s.f.) 4½ 1991*	99.50	1.00N	4.91	4.88	Baa	c
11/22	2	North Carolina Nat. Gas Conv. (s.f.) 2nd Mtge. 6s 1981	100.00	4.75N	6.00	—	—	a
11/29	30	Pennsylvania P. & L. 1st 4½ 1991*	101.22	.65C	4.55	4.49	Aa	a
<i>Preferred Stocks</i>								
11/16	10	Dallas P. & L. \$4.80 Pfd.	101.59	1.50C	4.73	—	—	d
11/16	10	Natural Gas Pipeline 5½ (s.f.) Pfd.	100.00	2.75N	5.25	—	—	a
<i>Common Stock—Offered to Stockholders</i>								
11/1	7	Idaho Power	37.25	.69N	2.68	—	3.92%	a
11/3	10	Atlantic City Electric	51.00	1.00N	2.67	—	3.29	a
11/15	9	Carolina P. & L.	62.25	1.15N	2.63	—	3.82	a
11/15	11	Col. & So. Ohio Elec.	73.50	1.70N	2.72	—	4.29	a

*Nonrefundable for about five years. C—Competitive. N—Negotiated. a—It is reported that the issue was well received. c—It is reported that the issue sold somewhat slowly. d—It is reported that the issue sold slowly.

Source, Irving Trust Company

DECEMBER 21, 1961

980

FINANCIAL NEWS AND COMMENT

corporation. Thus, even if Company A should invest \$50 million in the satellites, and Company B only half a million, each could designate two directors. There would also be three public directors appointed by the President, and another

director representing all carriers that would lease (rather than own) capacity in the system. Thus, no carrier's investment, however large, would enable it to dominate the joint venture. However, each carrier's investment would go into



RECENT UTILITY BROCHURES BY WALL STREET FIRMS*

<i>Company Analyses</i>	<i>Firm</i>	<i>Month Issued</i>
Alabama Gas	Joseph D. Goodman & Co. (Phila.)	Nov.
American & Foreign Power	Hardy & Co.	Oct.
American Tel. & Tel.	H. L. Robbins & Co., Inc.	Oct.
Anglo-Canadian Tel.	Amott, Baker & Co., Inc.	Nov.
Allegheny Power System	†Eastman Dillon, Union Securities & Co. ...	Nov.
Bell Tel. of Canada	D. H. Blair & Co.	Nov.
Boston Edison	†Eastman Dillon, Union Securities & Co.	Nov.
Brooklyn Union Gas	†Eastman Dillon, Union Securities & Co.	Nov.
California Water & Tel.	†Eastman Dillon, Union Securities & Co.	Oct.
Carolina P. & L.	Clark, Dodge & Co., Inc.	Oct.
Consolidated Nat. Gas	A. M. Kidder & Co., Inc.	Oct.
Consumers Power	Argus Research Corporation	Nov.
General Tel. & Elec.	Robert Garrett & Sons (Baltimore)	Oct.
Illinois Power	†Eastman Dillon, Union Securities & Co.	Nov.
Indianapolis Power & Light	F. S. Smithers & Co.	Oct.
Iowa-Illinois G. & E.	†Eastman Dillon, Union Securities & Co.	Oct.
Iowa Public Service	G. A. Saxton & Co., Inc.	Nov.
Kansas City P. & L.	†Eastman Dillon, Union Securities & Co.	Oct.
Middle South Utilities	†Eastman Dillon, Union Securities & Co.	Oct.
Middle South Utilities	Paine, Webber, Jackson & Curtis	Oct.
Mountain Fuel Supply	†Eastman Dillon, Union Securities & Co.	Nov.
National Fuel Gas	Auchincloss, Parker & Redpath	Nov.
Nevada Power	Ralph E. Samuel & Co.	Oct.
New England G. & E.	H. Hentz & Co.	Oct.
New York State E. & G.	†Eastman Dillon, Union Securities & Co.	Oct.
Pacific Northwest Bell Tel.	Dreyfus & Co.	Nov.
Pacific Northwest Bell Tel.	W. E. Hutton & Co.	Nov.
Pacific Northwest Bell Tel.	Dean Witter & Co.	Nov.
Pacific Northwest Bell Tel.	Pacific Northwest Company (Seattle)	Oct.
Panhandle Eastern P. L.	Bache & Co.	Nov.
Portland General Electric	Merrill Lynch, Pierce, Fenner & Smith	Oct.
Potomac Electric Power	Merrill Lynch, Pierce, Fenner & Smith	Oct.
Power Corp. of Canada	Dattels & Company Limited (Kitchener, Ont.)	Nov.
Providence Gas	Shields & Co.	Nov.
St. Joseph L. & P.	†Eastman Dillon, Union Securities & Co.	Nov.
Shawinigan Water & Power	Royal Securities, Inc.	Nov.
Sierra Pacific Power	Birr & Co., Inc. (San Francisco)	Oct.
So. Indiana G. & E.	†Eastman Dillon, Union Securities & Co.	Oct.
Suburban Gas	Schweickart & Co.	Oct.
Tennessee Gas Transmission	Fahnestock & Co.	Oct.
Utilities & Industries Corp.	Mitchum, Jones & Templeton	Sept.
Volunteer Nat. Gas	†Eastman Dillon, Union Securities & Co.	Nov.
West Ohio Gas	A. C. Allyn & Co.	Nov.
Western Natural Gas	W. E. Hutton & Co.	Oct.
Western Union	J. W. Sparks & Co.	Oct.
Wisconsin Electric Power	†Eastman Dillon, Union Securities & Co.	Oct.
Wisconsin Power & Light	†Eastman Dillon, Union Securities & Co.	Nov.
<i>Tabulations, General Studies, Etc.</i>		
Gas, Telephone & Water Utility Stocks	A. G. Becker & Co., Inc.	Nov.
Good Values in a High Utility Market	Goodbody & Co.	Oct.

*Published several times a year; last previous list was in October 26th issue.

†One-page analyses in monthly Public Utilities Bulletin.

PUBLIC UTILITIES FORTNIGHTLY

its own rate base, and the FCC would regulate rates in the same manner as at present.

Senator Kerr, chairman of the Senate Space Committee, has announced that he plans to introduce legislation that will in many respects conform to the recommendations of the Ad Hoc Committee, presumably soon after Congress convenes in January, which would be followed by hearings. (See, also, page 973.)

Natural Gas Proportion of Total Energy Expected to Increase to 35 Per Cent

ACCORDING to estimates prepared by the Chase Manhattan Bank in its recent brochure "Future Growth of the World Petroleum Industry," natural gas by 1970 will contribute 35 per cent of total U. S. energy requirements, compared with 28 per cent in 1960. Oil is

expected to drop from 45 per cent to 41 per cent, and coal from 23 per cent to 20 per cent, while hydro and nuclear power together will continue to contribute 4 per cent.

WHILE coal has been superseded by oil and gas in two major markets, transportation and space heating, it is still consumed in growing amounts by industry and the electric utilities. So long as coal can compete with gas in terms of cost (including transportation costs) it will thus enjoy moderate growth. Natural gas will continue to compete strongly with oil in all major markets—industry, space heating, fuel for electric utilities and transportation; oil seems unable to compete effectively with gas in most markets. Use of gas has been increasing at an annual rate of 6.7 per cent and a future growth rate of 5.7 per cent is projected, compared with only 2.7 per cent for oil and 2 per cent for coal.

FINANCIAL DATA ON ELECTRIC UTILITY STOCKS

Approx. Rev. (Mil.)			11/27/61 Price About	Divi- dend Rate		Approx. Yield	Recent Share Earnings	Per Cent Increase In Share Earnings		Price- Earnings Ratio	Div. Pay- out	Approx. Book Value
\$159	S	Allegheny Power System ..	55	\$1.80	3.3%	3.3%	\$2.40Oc	1%	3%	23.0	75%	\$18
338	S	American Elec. Power	77	1.96c	2.5	2.5	2.48Oc	1	6	31.0	79	24
74	S	Arizona Pub. Service	40	.72	1.8	1.8	*1.12Se	*10	*9	*35.6	64	19
14	O	Arkansas Mo. Power	29	1.08	3.7	3.7	1.45Se	3	5	20.0	74	11
40	S	Atlantic City Elec.	50	1.36	2.7	2.7	*1.70Oc	*9	*9	*29.4	80	12
175	S	Baltimore G. & E.	40	1.12	2.8	2.8	1.58Se	11	7	25.3	71	13
9	O	Bangor Hydro-Elec.	21	.80	3.8	3.8	1.19S	8	9	17.6	67	30
7	O	Black Hills P. & L.	47	1.80	3.8	3.8	2.59Jy	D3	3	18.1	69	21
124	S	Boston Edison	91	3.00	3.3	3.3	4.17Se	D1	4	21.8	72	52
34	A	Calif. Elec. Power	26	.84	3.2	3.2	*1.15Se	*12	*3	*22.6	73	12
11	O	Calif. Pac. Util.	28	.90	3.2	3.2	1.19Se	D13	1	23.5	76	13
82	S	Carolina P. & L.	59	1.64	2.8	2.8	2.41Oc	7	6	24.5	68	21
37	S	Central Hudson G. & E. ..	38	1.04	2.7	2.7	*1.52Se	*4	*7	*25.0	68	14
27	O	Central Ill. E. & G.	30	.88	2.9	2.9	1.28Se	10	6	23.4	69	16
45	S	Central Ill. Light	48	1.52	3.2	3.2	1.95Oc	D17	3	24.6	78	19
63	S	Cent. Ill. Pub. Service	77	2.12	2.7	2.7	3.10Oc	4	5	24.8	68	21
22	O	Central Louisiana Elec. ...	36	1.00	2.8	2.8	1.28Se	—	7	28.1	78	11
44	O	Cent. Maine Power	37	1.52	4.1	4.1	*2.11Oc	*10	*2	*17.5	72	25
173	S	Cent. & South West	48	1.02	2.1	2.1	1.43Se	D1	7	33.6	71	9
13	O	Cent. Vermont P. S.	25	1.08	4.3	4.3	*1.31Oc	*D7	*3	*19.1	82	14
153	S	Cincinnati G. & E.	52	1.50	2.9	2.9	2.30Se	2	3	22.6	65	16
10	O	Citizens Util. "B"	31	.60	1.9	1.9	.87Se	15	8	35.6	69	6
136	S	Cleve. Elec. Illum.	69	2.00	2.9	2.9	2.97Se	D3	4	23.2	67	25

FINANCIAL NEWS AND COMMENT

Approx. Rev. (Mill.)	(Continued)	11/27/61 Price About	Divi- dend Rate	Approx. Yield	Recent Share Earnings	Per Cent Increase In Share Earnings Re- cent	Price- Earnings 5-yr. Avg.	Price- Earnings Ratio	Div. Pay- out	Approx. Book Value
57 S	Columbus & S. O. E.	74	2.00	2.7	3.16Oc	10	6	23.4	63	25
469 S	Commonwealth Edison	49	1.00	3.8h	1.98Se	4	10	24.7	51	35
17 A	Community P. S.	50	1.00	2.0	1.56Se	3	5	32.1	64	13
89 O	Conn. Lt. & Power	33	1.20	3.6	*1.44Oc	*D4	* 6	*22.9	83	15
656 S	Consol. Edison	90	3.00	3.3	*3.64Se	*D5	* 5	*24.4	82	50
281 S	Consumers Power	84	2.60	3.1	3.59Oc	2	2	23.4	72	36
96 S	Dayton P. & L.	29	.88	3.0	1.22Je	13	3	23.8	72	31
55 S	Delaware P. & L.	59	1.20	2.0	1.77Se	9	8	33.3	68	14
279 S	Detroit Edison	67	2.20	3.3	2.74Oc	5	2	24.5	80	28
167 S	Duke Power	61	1.60	2.6	2.10Se	D6	7	29.0	76	22
105 S	Duquesne Light	33	1.24	3.8	*1.54Se	* 1	* 5	*21.4	81	10
38 O	East. Util. Assoc.	46	2.20	4.7	2.57Se	D3	—	17.9	87	26
3 O	Edison Sault Elec.	20	.90	4.5	1.18Se	15	—	16.9	76	10
19 O	El Paso Electric	31	.62	2.0	.86Se	D2	9	36.0	72	12
13 S	Empire Dist. Elec.	47	1.52	3.2	2.10Se	9	7	22.4	72	17
68 S	Florida Power Corp.	49	.96	1.9	1.39Se	9	12	35.3	63	11
173 S	Florida P. & L.	83	1.12	1.3	2.13Se	2	15	39.0	53	17
4 O	Florida Pub. Util.	29	.72d	2.5	1.27Se	D1	7	22.8	57	11
205 S	General Pub. Util.	37	1.20	3.2	*1.56Se	* 2	* 5	*23.7	77	15
7 O	Green Mt. Power	19	.80	4.2	.93Se	D4	4	20.4	85	13
86 S	Gulf States Util.	45	1.00	2.2	1.29Oc	D7	5	34.9	77	13
54 A	Hartford Electric	84	3.00	3.6	*3.92Se	*15	* 1	*21.4	76	43
31 O	Hawaiian Electric	115	2.76	2.4	3.75Se	21	5	30.9	73	37
116 S	Houston L. & P.	118	1.60	1.4	3.17Oc	D3	5	37.2	50	24
38 S	Idaho Power	39	1.00	2.6	1.46Se	12	6	26.7	68	29
110 S	Illinois Power	87	2.20	2.5	3.08Oc	6	11	28.2	71	20
56 S	Indianapolis P. & L.	68	1.90	2.8	2.71Se	2	7	25.1	70	19
34 S	Interstate Power	26	.95	3.7	1.16Se	D1	4	22.4	82	9
46 S	Iowa Elec. L. & P.	60	1.80	3.0	2.70Oc	4	5	22.2	67	21
51 S	Iowa-Illinois G. & E.	52	1.90	3.7	2.53Se	D3	3	20.6	75	20
51 S	Iowa P. & L.	47	1.60	3.4	2.15Se	D10	2	21.9	74	20
42 O	Iowa Public Service	29	.96	3.3	1.40Oc	18	5	20.7	68	11
17 O	Iowa Southern Util.	39	1.48	3.8	2.07Oc	D4	4	18.8	71	21
68 S	Kansas City P. & L.	83	2.40	2.9	3.46Oc	6	6	24.0	69	31
37 S	Kansas G. & E.	68	1.76	2.6	2.86Oc	5	7	23.8	62	23
57 S	Kansas P. & L.	52	1.48	2.8	2.40Se	D3	7	21.7	61	19
49 O	Kentucky Util.	51	1.72	3.4	2.82Se	6	6	18.1	61	22
8 O	Lake Superior D. P.	30	1.28	4.3	1.77Se	2	4	16.9	72	18
145 S	Long Island Ltg.	58	1.50	2.6	*2.18Se	—	*10	*26.6	69	20
71 S	Louisville G. & E.	71	1.52	2.1	2.73Se	—	8	26.0	56	22
13 O	Madison G. & E.	40	1.00	2.5	2.14Se	3	3	18.7	47	21
5 A	Maine Pub. Service o	22	1.00	4.5	1.28Oc	17	4	17.2	78	14
8 O	Michigan G. & E.	101	2.00e	5.0e	5.73Se	3	8	17.6	35	29
215 S	Middle South Util.	40	1.06	2.7	1.54Oc	4	10	26.0	69	14
35 S	Minna. P. & L.	43	1.60	3.7	2.37Oc	D5	5	18.1	65	21
16 S	Missouri P. S.	26	.72f	4.8f	1.00Se	D12	5	26.0	72	8
9 O	Missouri Util. l	27	1.00	3.7	1.22Se	D10	2	22.1	82	19
49 S	Montana Power	41	1.12	2.7	1.53Se	6	6	26.8	73	10
9 O	Nevada Power	53	.84m	1.6	1.56Se	14	5	34.0	54	15
180 S	New England Elec.	27	1.12	4.1	1.35Je	D2	2	20.0	83	15
55 O	New England G. & E.	36	1.24	3.4	1.87Se	7	6	19.2	66	18
110 S	N. Y. State E. & G.	41	1.30	3.2	*2.11Oc	*16	* 8	*19.4	62	19
299 S	Niagara Mohawk Power ..	47	1.80	3.8	*2.32Se	* 4	—	*20.3	78	23
124 O	Northern Indiana P. S.	44	1.20	2.7	1.82Se	8	5	24.2	66	28
183 S	Northern Sts. Power	37	1.18	3.2	1.53Se	3	5	24.2	77	12
13 O	Northwestern P. S.	30	1.20	4.0	1.62Se	D9	5	18.5	74	13
160 S	Ohio Edison	51	1.60	3.1	2.18Oc	2	4	23.4	74	17
62 S	Oklahoma G. & E.	48	1.20	2.5	1.56Oc	8	5	30.8	77	11
31 S	Orange & Rockland Util. ..	59	1.20	2.0	*1.78Se	* 6	*12	*33.1	67	14
20 O	Otter Tail Power	44	1.80	4.1	2.24Se	D3	2	19.6	78	25
648 S	Pacific G. & E.	100	2.80	2.8	*4.35Se	* 7	* 5	*23.3	64	42
63 O	Pacific P. & L.	57	1.80	3.2	*2.24Se	*10	* 5	*25.4	80	20
142 S	Penn. P. & L.	40	1.32	3.3	1.73Se	D3	4	28.1	76	13
273 S	Phila. Electric	35	1.20	3.4	*1.53Se	* 7	* 4	*22.9	78	28

PUBLIC UTILITIES FORTNIGHTLY

Approx. Rev. (Mill.)		(Continued)	11/27/61 Price About	Divi- dend Rate	Approx. Yield	Recent Share Earns.	Per Cent Increase In Share Earns.		Price- Earnings Ratio	Div. Pay- out	Approx. Book Value
							Re- cent	5-yr. Avg.			
45	O	Portland Gen. Elec.	51	1.52	3.0	2.18Oc	8	5	23.4	69	19
89	S	Potomac Elec. Power	49	1.44g	2.9	*2.00Se	* 2	* 6	*24.5	72	20
113	S	Pub. Serv. of Colo.	102	2.10n	2.1	*3.76Se	*33	* 4	*27.1	56	26
394	S	Pub. Serv. E. & G.	69	2.20	3.2	*3.33Se	*32	* 4	*20.7	66	28
92	S	Pub. Serv. of Ind.	70	2.20	3.1	2.77Se	7	2	25.3	79	28
35	O	Pub. Serv. of N. H.	25	1.08	4.3	1.40Oc	1	2	17.9	77	14
20	O	Pub. Serv. of N. M.	35	.72	2.1	1.03Se	3	11	34.0	70	13
37	S	Puget Sound P. & L.	42	1.56	3.7	*2.02Se	*D5	* 7	*20.8	77	23
76	S	Rochester G. & E.	60	1.80b	5.0b	*3.11Se	* 7	* 8	*19.3	58	32
11	S	St. Joseph L. & P.	43	1.60	3.7	2.19Se	D3	8	19.6	73	19
81	S	San Diego G. & E.	37	1.20	3.2	1.52Se	D21	9	24.3	79	19
12	O	Savannah E. & P.	40	1.20	3.0	1.40Ap	14	4	28.6	86	14
14	O	Sierra Pacific Pr.	34	.88	2.6	1.06Se	D17	12	32.1	83	9
306	S	So. Calif. Edison	98	2.60k	2.7	*4.65Se	* 5	* 7	*20.8	56	44
56	S	So. Carolina E. & G.	59	1.50	2.5	2.16Se	8	8	27.3	70	19
297	S	Southern Co.	60	1.50	2.5	2.00Se	D1	7	30.0	75	17
22	S	So. Indiana G. & E.	52	1.70	3.3	2.71Au	8	3	19.2	63	23
4	O	Southwestern E. S.	23	.76	3.3	1.00Oc	—	5	23.0	76	8
54	S	Southwestern P. S.	32	1.00	3.1	1.12Oc	D1	6	28.6	89	9
41	A	Tampa Electric	49	.80	1.6	1.21Oc	D1	12	40.5	66	11
202	S	Texas Util.	113	2.08	1.8	3.22Oc	4	9	35.1	65	22
49	S	Toledo Edison	27	.70	2.6	1.14Se	5	1	23.7	61	10
20	O	Tucson G. E. L. & P.	51	.80	1.6	1.06Se	D12	9	48.1	75	9
159	S	Union Electric	51	1.80	3.5	*2.22Se	* 2	* 7	*23.0	81	18
40	O	United Illuminating	34	1.40	4.1	*1.72Se	—	* 2	*19.8	81	16
8	O	Upper Peninsula Pr.	40	1.70	4.2	2.23Se	5	—	17.9	76	20
53	S	Utah Power & Light	41	1.32	3.2	1.81Oc	D4	4	22.6	73	20
161	S	Virginia E. & P.	67	1.30	1.9	*1.99Oc	* 9	* 8	*33.7	65	16
40	S	Wash. Water Pr.	53	2.00	3.8	*2.47Oc	* 5	* 3	*21.5	81	29
87	O	West Penn Power	80	3.20	4.0	3.68Se	2	2	21.7	87	26
14	O	Western Lt. & Tel.	34	1.20	3.5	1.82Oc	4	6	18.7	66	29
34	O	Western Mass. Cos.	29	1.20	4.1	1.55Oc	D4	1	18.7	77	19
141	S	Wisc. El. Pr. (Cons.)	59	1.90	3.2	2.78Se	4	3	21.2	68	29
48	O	Wisconsin P. & L.	48	1.60	3.3	2.35Se	D1	8	20.4	68	21
48	S	Wisconsin P. S.	44	1.40	3.2	2.03Se	D1	4	21.7	69	18
Averages					3.1%		3%	6%	24.6	72%	
Foreign Companies											
127	S	American & Foreign Pr. ...	9	\$.50	5.6%	\$1.54Je	52%	0%	5.8	32%	\$33
161	A	Brazilian Traction	34	—	—	.98De	70	—	3.6	—	29
26	O	Calgary Power	23	.40	1.7	1.17Se	10	13	19.6	34	6
26	O	Canadian Inter. Power	12	.50	4.2	3.55Je	D2	NC	4.3	14	24
19	A	Gatineau Power	39	1.90p	4.9	2.25De	13	2	17.3	84	22
17	A	Quebec Power	35	1.60	4.6	2.53De	8	9	13.8	63	27
83	A	Shawinigan Water & Pr. ..	23	.80	3.5	1.54De	6	6	14.9	52	19

*Deferred taxes resulting from liberalized depreciation are not normalized. If they had been normalized the price-earnings ratio would be higher, and the rate of increase in share earnings would be smaller. D—Decrease. NC—Not comparable. A—American Stock Exchange. O—Over-the-counter or out-of-town exchange. S—New York Stock Exchange. Ja—January; F—February; Ma—March; Ap—April; My—May; Je—June; Jy—July; Au—August; Se—September; Oc—October; N—November; De—December. b—Also 2 per cent stock dividend (payable January 25, 1962) included in the yield; similar dividends are paid annually, representing balance of earnings. c—Also 2½ per cent stock dividend January 10, 1961. d—Also 2 per cent stock dividend May 1, 1961. e—Also annual 3 per cent stock dividend included in the yield. f—Also regular stock dividend of one-half per cent quarterly, included in yield (paid since 1956). g—Also 2 per cent stock dividend January 10, 1962. h—Also 2 per cent stock dividend payable November 1, 1961, included in yield; stock dividends are paid annually, reflecting balance of earnings. j—The rate of increase would be 12 per cent if the present number of shares had been used to compute share earnings of past years, instead of using the number of shares actually outstanding at the end of each year. k—Also 4 per cent stock dividend February 24, 1961. l—Adjusted for 50 per cent stock dividend June 5, 1961. m—Fifty per cent stock dividend payable January 18, 1961—cash dividend on new stock 84 cents. n—Also 5 per cent stock dividend February 17, 1961. o—Adjusted for 13-for-10 stock split record June 27, 1961. p—Also stock dividend of one share Gelco Enterprises for each share of Gattineau Power.



What Others Think

What Do Insurance Company Investors Look for?

THE so-called institutional investor—notably the insurance company—has long been a party of unique concern to the regulated public utility industries. The concern is a mutual one, inasmuch as the insurance companies do not have the broad latitude in investment that unrestricted investors have, and because public utility securities have long been a prime repository for insurance company funds. On the other hand, public utility companies have looked to the insurance companies and other institutional investors as a reliable source for raising vast sums of money needed for financing ever-increasing expansion of utility plant.

This much is only a bare restatement of a well-known relationship. But it is the basis for an incentive on both sides—that is to say, insurance company investment specialists and public utility financial officers—to discover the practices and motivations which lie behind the behavior of both parties to this area of common interest. For this reason, any book by an experienced institutional finance specialist which purports to tell what an insurance company looks for, or, in personal terms, what he—the individual specialist—looks for in committing his company's funds, should be welcomed and read with profit by public utility management people.

SUCH a book is one just off the press—"Investing for a Financial Institution," by Fergus J. McDiarmid, FSA (published by Life Office Management Association, 110 East 42nd street, New York 17, New York). This work is of special value for such a readership for three reasons, all of which have to do with the author. First of all, Mr. McDiarmid is vice president of The Lincoln National Life Insurance Company and an acknowledged actuarial authority. He has put in more than three decades with that same company, much of the time specializing in public utility securities. Based on his responsibility for the status of the Lincoln National Life public utility security portfolio, Mr. McDiarmid has naturally developed a vast store of information, tests, and gauges for determining when to buy and sell what. This is the second unique qualification of this book—a mastery in the field of assembling and evaluating facts and trends bearing on this highly specialized area of financial operation.

THE third qualification of this author deals with his excellence as a writer—his ability for two-way communication which is not too often found among specialists in this field. But as readers of his many excellent and thoughtful articles

PUBLIC UTILITIES FORTNIGHTLY

in the FORTNIGHTLY over a number of years can bear witness, Mr. McDiarmid has an admirable facility for expressing complicated economic and financial concepts simply, clearly, and in a most interesting and imaginative fashion.

"INVESTING FOR A FINANCIAL INSTITUTION" is not restricted, of course, to a consideration of public utility securities, although there is a chapter devoted to that subject, and another to railroads, and still another to municipals and other tax-exempt bonds. But the whole organization of the book should be of value to utility management people because it gives the reader a picture of what the responsibilities of the financial institutions are, spanning the whole range of investments of all kinds.

A savor of the originality of this author's approach can be seen in the very first paragraphs of the preface, where he compares the responsibility for preserving savings to a water reservoir:

Savings are one of the things in this world which in an absolute sense cannot be saved. This is because the savings process is a dynamic one represented by the excess of production over consumption. Savings may be likened to the energy in the water in a flowing stream. This energy may be stored with varying degrees of loss, depending upon leakage and evaporation, by impounding it behind a dam.

In order to preserve for future use the results of the savings process, various media are available, none of them perfect and nearly all of them highly imperfect. These media include bonds, mortgages, bank deposits, and life insurance policies. They also include common stocks and the ownership of real estate and other physical property.

The task of preserving, and if pos-

sible enhancing, the purchasing power initially resulting from savings is an enormously difficult and complicated one and has been so throughout history. It was probably easiest during those rather exceptional historical periods, such as the century between the Napoleonic Wars and World War I, during which some important world currencies tended to maintain rather well their value over extended periods of time. The tendency of money to lose value through inflation adds greatly to the problem of perpetuating the values originally established by savings.

THERE are many temptations for a reviewer to quote similar provocative passages of this work which must be resisted in the interest of brevity. The financial institution itself is traced back to its early origin as an obscure fund for Presbyterian ministers in 1759, but which first emerged in modern life insurance company form with the sale of policies by the Mutual Life Insurance Company of New York in 1843. This was followed by the emergence of fire and casualty insurance companies and later pension and endowment funds and savings and loan associations to round out the evolution of the institutional investment family.

Chapter 3, which deals with the problem of inflation, reviews the fortunes of bondholders (whom the author feels have fared badly) all the way back to 1731 when the average yield on British Consols was 3 per cent. Other chapter headings suggest the broad scope of this work: "The Appraisal of Investment Risks" (Chapter 4); "Corporate Bond Performance" (Chapter 5); "The People Who Decide" (Chapter 6). Then follow the separate chapters already noted on government bonds (Chapter 7); util-

WHAT OTHERS THINK



"YOU BROUGHT THE WRONG COLOR—I ORDERED FLAMINGO PINK!"

ity securities (Chapter 8); "Industrial and Commercial Securities" (Chapter 9); and "Railroad Securities" (Chapter 10).

Reference is also made to the rapid increase in consumer financing since World War II (Chapter 11). The last five chapters of the book deal with an explanation of institutional investor techniques and preferences, such as convertible debentures, the management of common stock portfolios, mortgage loan investments, the pros and cons of bond amortization, and other methods of valuing assets, and,

finally, the legal requirements governing institutional investment risks.

M^{R.} McDIARMID's chapter on "Public Utility Securities" stresses the importance of the regulatory impact and the inequity (from the author's point of view) of rigid adherence to strict original cost rate base standards, and the refusal of some regulatory authorities to face the realistic facts of life in an inflationary era. The expedient alternative of "Regulatory jurisdictions which continue to adhere to the economically obsolete theory

PUBLIC UTILITIES FORTNIGHTLY

of original cost in establishing a utility rate base" (page 121) by attempting a compensatory adjustment in the rate of return is dismissed as unsatisfactory.

After dealing briefly with financial problems in the electric, telephone, and gas (all three segments of gas) utility industries, the author reviews the trend in public utility common stocks which he feels does not measure up to the hopes

of those who seek an inflationary hedge. There is some enlightening comment also on the management factor and a conclusion based on the illustrated example of financing by a very large natural gas pipeline company.

The book is published as one of the "Institute Series" of volumes offered by the Life Office Management Association.

—F. X. W.

Swidler Speaks on Natural Gas Regulation

THE natural gas industry has been told that developments in recent years have shown that federal regulation of rates in the field is essential to safeguard supplies and stabilize prices, and that it is "unthinkable" the ultimate consumer should be left without this protection.

The statement was made by Federal Power Commissioner Joseph C. Swidler in a talk before the American Petroleum Institute in Chicago last month. He made a strong defense of the Natural Gas Act, and said that as interpreted by the Supreme Court to extend to the supplies of gas dedicated in the field to interstate consumers, it represents "a sound and far-sighted exercise of legislative judgment."

At the outset, Swidler called for an increase in co-operation between all three major segments of the industry—producers, pipelines, and distributors. One of the major purposes of the API, he added, was the achieving of this goal of co-operation.

Swidler admitted that regulation by a government agency frequently does not sit comfortably upon American businessmen, especially in an industry such as natural gas in which initiative and enterprise "are the very lifeblood" and in which regulation is still comparatively new and strange.

The abrupt manner in which producer

regulation at the federal level began in 1954 makes it easy to understand why the natural gas industry was reluctant to welcome the new exercise of jurisdiction by the FPC, he continued, and the uncertain status of producer regulation in the ensuing years has not helped to make the commission's rôle more popular. The greatest handicap, Swidler believes, to the full acceptance of the FPC has been the feeling of many in the industry that federal regulation at the point natural gas is introduced into interstate commerce is neither necessary nor feasible. The FPC chairman definitely stated, however, that he was in full accord with the Supreme Court's ruling in the Phillips case, which was an interpretation of the Natural Gas Act, which extended regulation to gas supplies in the field dedicated to interstate commerce.

FUNDAMENTAL here, he said, is the fact that transmission and distribution of natural gas are everywhere recognized to be public utility functions. Almost all natural gas, wherever produced, can ultimately find its retail market only through the pipes and mains laid under city streets by a franchised monopoly to which is delegated some of the rights of government. Similarly, the pipelines can bring the gas to the market only as quasi-gov-

WHAT OTHERS THINK

ernment corporations, enjoying the governmental authority to condemn rights of way by eminent domain proceedings. Both are clear-cut examples of public utilities. It is not possible, Swidler added, to maintain regulation of the pipelines and the distributing companies in the public interest if the sources of supply are not likewise subjected to certificate and rate control.

THE major purpose of regulation, Swidler stated, is to protect the long-run interests of the ultimate consumer, and it is essential that supplies be safeguarded and prices stabilized through regulation at the field level.

When the Natural Gas Act was passed in 1938 there may have been ground for doubting the need for federal regulation at the producer level, but the developments since then have gone far to demonstrate that such regulation is essential, it was pointed out. In 1938 there were approximately 6.5 million ultimate consumers of natural gas, a large proportion of them in states with plentiful local supplies. The volume of natural gas moving in interstate commerce in that year was 600 billion cubic feet, and the average wellhead price was less than five cents per Mcf. Natural gas was still a little-valued by-product. Today there are over 34 million consumers of natural gas and last year over 7 trillion cubic feet moved in interstate commerce, a twelvefold increase. The wellhead price has more than trebled to an average of 15.6 cents per Mcf in 1960.

Were natural gas supplies, like coal, so abundant that natural market forces would be adequate to protect the public interest or, like oil, so readily transportable that irrespective of the distances from points of origin to the markets competition would operate to protect the

consumer, it may be that natural gas regulation at the producer level would be unnecessary. But Swidler explained the case was different with respect to natural gas. Of all the forms of energy consumed in the United States, natural gas is in the shortest supply in relation to actual and potential demand. It is his opinion that the public interest in the availability of natural gas at reasonable prices cannot be safeguarded without federal regulation.

SWIDLER recognized that misguided or shortsighted regulation could make the situation worse rather than better. The sale of natural gas in the field by no means fits the classic definition of a public utility activity, he said. Regulatory bodies must keep in mind that they cannot direct producers to find gas or to dedicate it to the interstate market even though regulatory policies may have a great deal to do with decisions in these matters. The Natural Gas Act recognizes the vital distinction between these activities and the regulation of natural gas supplies once they have been found and attached to the interstate gas stream, he said. Swidler continued:

Thus, in the aspects of your business in which you are free from federal regulation, we must hold open to you as private enterprisers incentives which will encourage you to find more and more natural gas and to dedicate sufficient quantities of your reserves to the interstate market. We (the FPC) have the difficult task of guarding against unjustified increases in the price of gas at the wellhead while at the same time making sure that the price is high enough to insure its availability.

THE major problem facing the commission in the natural gas field, the FPC chairman stated, is formulating the

PUBLIC UTILITIES FORTNIGHTLY

ground rules for regulating producer rates:

I have made clear on previous occasions my view that area rate proceedings seem to afford the most promising administrative vehicle. . . . We are attempting, step by step, to shape these area proceedings so as to bring them to an early and meaningful conclusion. . . . We probably shall not initiate any new area proceedings until the first two are moving along under well-established and tested procedures. However, we are not going to neglect the backlog of cases in other areas. The commission will not settle for a do-nothing policy in any area of its work. We shall push to completion all individual producer cases now in hearing, and begin hearings on other pending cases to the extent that our man power permits.

SPEAKING on the settling of the FPC's backlog of cases, Swidler said:

Settlements are like peace, prosperity, and cleanliness; no one opposes them, but it takes more than good intentions to bring them about. Of course, the starting point is a desire on everyone's part to compose differences and work out a solution that is fair and equitable. . . . A second condition for a successful settlement program is that all parties must forswear efforts to vindicate fixed positions or to test legal principles for their own sake. . . . If we approach pending cases as a question of money and work for a solution which represents a fair measure of the number of dollars that the company can justify, we shall make progress in settling rate cases.

SWIDLER explained that the problem of easing the regulatory burden for the small independent producer has also been given much attention by the commission in recent weeks. The FPC has considered the possibility of a complete exemption, but was compelled to reject this course for reasons both practical and legal. The FPC is not satisfied, however, to do nothing about this problem, and is working to develop a policy toward small producers that will protect the public interest while minimizing the burdens of regulation. Swidler believed the area rate proceedings, by relieving small producers of the burden of trying individual rate cases before the commission, are a significant step in that direction. In an area proceeding, of course, hundreds of small producers can combine their efforts and present a common case. This approach should relieve the worst fears which regulation has posed to the small independent producer.

The commission is also taking steps in the Permian basin area proceeding to recognize the handicaps which the smaller operators face in reporting on their operations. It has exempted all those producing less than two billion cubic feet a year—a figure which the commission may raise—from answering the comprehensive cost questionnaire in that proceeding, and instead are substituting a short-form questionnaire for their use.

ANOTHER recognition of the special problems of the small producer is the development of a simplified form, soon to be released, which will enable small producers to notify the FPC of rate increases authorized by contract without making any other filings. It is hoped this will reduce significantly the paper work burden on the small producers, he said.

WHAT OTHERS THINK

Pacific Northwest Talks about Utility Take over

THE seizure of one of Canada's largest investor-owned utility companies by the British Columbia provincial government came under fire recently during the annual meeting of the Pacific Northwest Trade Association in Victoria, British Columbia.

Ray Williston, Canadian Social Credit party leader and a Cabinet minister, discussed the confiscation of the private British Columbia Electric Utility Company last August by the B. C. government. The seizure of the 1,000-megawatt electric utility has raised important questions and left cloudy the future of electric power development in the Province, in Canada, and in the U. S. Pacific Northwest as well.

Premier W. A. C. Bennett announced the planned expropriation of the utility before the legislature on August 1st and received approval within two days.

An official of the former utility, Otto Zwanzig, addressing the recent meeting of the Northwest Electric Light and Power Association, said that the company was doomed by its refusal to push ahead with the large-scale but apparently uneconomical Peace river power project. The utility, he said, was offered the choice of developing the huge Peace river project as the price for remaining a privately owned company. The company management had believed, Zwanzig stated, the large undertaking in a sparsely settled northern section of the Province was uneconomical from a private investment standpoint.

The Peace River Power Development Company, a concern organized to develop the industrial potential of the Peace region, and the East and West Kootenay Power companies, two smaller investor-owned utilities, also became property of the Province.

Bennett's provincial government and the Canadian federal government in Ottawa have been feuding over treaty projects and terms relating to the proposed joint treaty between the U. S. and Canada for the development of Columbia river electric power. Canadian ratification of the pact is holding up work on the project.

THE treaty, signed by Prime Minister Diefenbaker and former President Eisenhower in January, provides the U. S. 15.5 million acre-feet of storage, for which the U. S. pays Canada \$64.4 million.

The United States would "wheel" to Canada one-half the additional power made available at existing U. S. Columbia river hydro plants, estimated at 2.5 million kilowatts dependable capacity. Canada would pay the U. S. \$1.50 for



PUBLIC UTILITIES FORTNIGHTLY

each kilowatt. Additional Canadian generation would be installed later.

The seizure of the British Columbia Electric Company puts Bennett one up on Ottawa over development of the Peace and Columbia river regions.

The Peace river, Bennett's pet project, could ultimately generate as much as 3.5 to 6 million kilowatts. He granted a development concession to the late Swedish financier Axel Wenner-Gren for a huge industrial-metallurgical complex, and Wenner-Gren put between \$5 and \$7 million into engineering investigations.

BENNETT decided to take over B. C. Electric after the B. C. Energy Board, appointed by him to study the comparative power costs, turned in a report stating that Peace river power would cost, for a basic growth rate, 4.37 mills if developed by a public body but 6.59 mills if developed by private interests. The same report said that Columbia power would cost 4.4 mills if developed by a public agency.

The Energy Board said that simultaneous development of both sites was feasible, but only if Ottawa allows export of power to the U. S. The board made no recommendation of which to develop if the federal government prohibits power export, but Bennett sees the Peace as providing the biggest boost to British Columbia economy.

Ottawa does not. The federal government is holding the treaty, signed by the U. S. and Canada, and ratified by the U. S. Senate, which calls for development of the Columbia and does not involve power export, which some Canadians disapprove of.

Furthermore, Ottawa is suspicious of Bennett's figures. Government studies indicate Columbia power would cost only 3.6 mills, with Peace much more costly. Now, though, Bennett controls the only

Canadian markets through which Columbia power can be marketed, and Ottawa is feeling the pinch.

In effect, Bennett has served notice on Ottawa that unless it goes along with his power export plans he will scuttle the Columbia project. Bennett maintains that since Peace power is competitive with Columbia power in Vancouver, it does not matter if Columbia is developed or not.

By taking the Peace project under his wing, Bennett has let the Wenner-Gren interests out of an uncomfortable spot. Reliable estimates of the cost of Peace development now go as high as \$1 billion, and the pay-back time recedes farther into the future. And Wenner-Gren retains the industrial and metallurgical concessions.

NO plans are in prospect for combining B. C. Electric with the provincially owned B. C. Power Commission, which serves much of rural British Columbia. Bennett has assigned the Peace to BCE and the Columbia to BCPC.

He maintained that critics would, if the systems were combined, accuse him of using Columbia money to finance the Peace. "If we keep the organizations separate, people will know whether each project is making money. The Peace must stand on its own; so must the Columbia." He added, however, that if Ottawa permanently blocked the Columbia by refusing to grant him an export license, the two would probably be merged.

Bennett said that no export at "fire sale" prices is contemplated. He is sure that power can be sold in the U. S. for more than four mills, which he feels will be the long-term British Columbia cost.

Bennett still has some problems. To develop the Peace economically, he still has to export power—it cannot all be absorbed in British Columbia. And financ-

WHAT OTHERS THINK



Courtesy, *The Philadelphia Inquirer*

DARE-DEVIL RESCUE

ing the Peace will not be easy after he has already increased the provincial debt from about \$600 million to about \$1.3 billion by the take over. But he still can effectively scuttle the Columbia treaty, and Justice Minister Davie Fulton, chief federal spokesman, has grudgingly conceded that Ottawa may consider export of power to the U. S.

In Washington, U. S. observers think the treaty will be ratified despite Bennett's action. They feel Ottawa will be able to ratify the treaty this year, even though federal and provincial positions are apart at present. And Washington

still thinks Columbia development will precede the Peace.

THERE is no doubt of the legality of Bennett's move. The British North American Act gives provinces control of civil and property rights. Indeed, the provincial government had previously used its inherent powers to bring 29 smaller utilities into the B. C. Power Commission. However, Bennett considered the extraordinary implications of the BCE seizure warranted a special act, and introduced "The Power Development Act of 1961."

PUBLIC UTILITIES FORTNIGHTLY

Bill 5 of this act empowered the provincial government to convert BCE to a Crown corporation.

The nationalized British Columbia Electric Company announced it is going ahead with development of the Peace river project as promised by Bennett when he expropriated the utility. Dr. Gordon Shrum, whom Bennett named to head the company, has announced that a contract for a work tunnel would be placed this fall. The tunnel will ulti-

mately form one of the three diversion tunnels, which are expected to cost \$18 million.

Controversy over the nationalization still exists, although it is now more subdued than immediately after the take over. Bennett told a press conference that his move had forestalled a proposed boost in power rates. The former executives of B. C. Electric have denied the charge vigorously. Bennett has hinted that he will cut rates just prior to the next elections.

Comments on Russian Oil Exports

DESPITE a continuing world surplus of oil, Russia's government-controlled oil industry has made rapid progress. Since 1955 Russia has increased its crude oil production by an average annual rate of 16 per cent, while the comparable U. S. gain in the same period was only 1 per cent. According to a report on the world oil industry by the British Petroleum Co., Ltd., only Africa and Iran exceeded Russia's production figure. On the other hand, Russian determination to claw the western international petroleum companies to tatters through the use of politically appealing cut-rate prices seems to be wavering because of the financial losses this policy is engendering.

While the Soviets have met their contractual agreements set up over the past two years, which, by and large, call for the Reds to supply crude oil, or finished products, in exchange for other commodities, the Russians lately have made no overt moves to expand their market. Dr. Perez Alfonzo, Venezuelan oil minister, who recently talked with Russian oil industry spokesmen, said that the Soviets gave him "assurances" but not "promises" that the U.S.S.R. would not double its oil exports to the Free World within the next ten years.

In any event, observers feel, "promises" or "assurances" of not pushing their oil exports both represent apparent concessions from the Russians and a reversal from the hard-hitting techniques which characterized their efforts a year ago to penetrate any and all western or uncommitted oil markets which offered political appeal to them. The reason for the change, it is felt, is that, for one thing, Russia is involved with a variety of completely political areas (such as Berlin) at the present, and as a result the quasi-economic areas have lost their luster for the moment. The Russians also probably feel that they do not need to stir a finger to make life more miserable for the international major oil companies, as a combination of nationalistic aspirations on the part of some of the underdeveloped "neutral" oil-producing nations such as Indonesia, along with the chronic problem of oil oversupply, is more than presenting new problems to these companies.

ACCORDING to the British oil study, consumption of petroleum products in Russia has had an annual gain averaging 12½ per cent since 1955, a figure exceeded only by Japan, Italy, and Germany. The U. S. average has been about 3 per

WHAT OTHERS THINK

cent. The Soviets boosted exports 34 per cent a year in the six-year period while United States exports dropped some 12 per cent a year.

Russia trailed badly only in two departments—imports and the world tanker fleet at the end of 1960. Only 10,000 barrels of crude oil daily were imported by Russia last year. The United States imported 1,029,000 barrels of crude and 787,000 barrels of products.

The Russian tanker fleet approximated 1.3 million tons at the end of 1960 but this accounted for only 2 per cent of the world fleet. Tankers flying the United States flag totaled 8.9 million tons or 14 per cent. The United States also has numerous domestically controlled tankers registered under other flags, but none of Russia's tankers are registered in other areas.

The United States still leads in crude reserves but the advantage is very thin. Reserves at the end of 1960 approximated 31.6 billion barrels or 10.4 per cent of all proved world reserves. The Russian estimate was 31.5 billion or 10.3 per cent.

DOMESTIC refiners held a wide margin in refining capacity with 9,360,000

barrels a day compared with Russia's 3,015,000. But Russia's expansions have averaged $17\frac{1}{2}$ per cent a year since 1955 while the United States has averaged only 4 per cent.

Domestic crude production averaged 6,810,000 barrels a day in 1955 while Russian production averaged only 1.4 million. Last year's domestic production averaged 7,040,000 barrels but Russian output had more than doubled to 2,970,000 barrels daily.

RUSSIA's consumption gain was not quite as impressive. Oil consumption by the Soviets in 1955 averaged 1,620,000 barrels a day compared with 8,460,000 in the United States. Russia last year used an average of 2,890,000 barrels a day compared with 9,680,000 in the United States.

United States oil exports last year averaged only 208,000 barrels a day. Russia averaged 457,000. Russian shipments to Western Europe averaged 337,000 barrels a day compared with only 44,000 from the United States. Russia also shipped 40,000 barrels a day to the Western Hemisphere, 60,000 to Africa, and 20,000 to the Eastern Hemisphere.

Report Hits Federal Regulation

A RECENT report, entitled "Energy Policy and Competition" and prepared by the Petroleum Industry Research Foundation, has warned against undue governmental encroachment into the fuel regulatory area.

"The energy sector of the United States economy provides a good illustration of competition at work," the report said in warning against what it considered the growing threat of additional federal attempts into tightening regulatory policies

covering the oil, coal, and gas industries.

IF American consumers are to continue to enjoy ample supplies of oil, natural gas, and coal, the booklet said, federal policies concerning these fuels must remain flexible, not rigid. However, it admitted that while a continuation of freedom in the fuels market is desired, there can be times when intervention is necessary and desirable. In these "special cases," it admits, "other policies must

PUBLIC UTILITIES FORTNIGHTLY

be invoked." The traditional viewpoint is that the government has intervened in the energy industry only when it was clear that reliance on competition alone was either impractical or not consistent with the public interest.

As examples of regulation and intervention which have been in the public good, the report cites regulation of public utilities, the conservation of natural resources, protection of the national security (including control of foreign crude oil imports), and the enforcement of anti-trust laws under the Sherman and Clayton acts.

However, the study added, there have been cases where the government has encroached too far. An example given of this is the extension of natural gas regulation from pipeline transmission to well-head prices, and the restriction of residual oil imports. It says that residual oil import controls are unnecessary because, unlike crude oil, residual oil is produced in declining quantities in this country and "therefore must be increasingly supple-

mented by residual oil imported from abroad."

THIS study comes at a time when congressional committees and the Kennedy administration are preparing to investigate the nation's fuels policies in general, and such particular items as residual oil import restrictions and other related subjects.

For the past 100 years, the report states, the nation's energy industries have been characterized by: (1) a high degree of adaptability to meet changing consumer demands; (2) a low degree of economic concentration; and (3) considerable ability to cope with the creative challenges of technological innovations.

A minimum of governmental intervention has provided an atmosphere in which these characteristics have developed, according to the study. It concludes by stating that if this relative freedom is allowed to remain, and if the fuels industries are not tied by excessive government regulation, competition and free enterprise will allow the energy industry to both grow and control itself.

Notes on Recent Publications

GLOSSARY OF ELECTRIC AND NUCLEAR TERMS. Recently the Edison Electric Institute has published two pamphlets which should be of value to persons in the electric utility field. The first of these is the "Glossary of Electric Utility Terms" which is an expanded revision of the 1956 edition. It contains definitions of about 400 of the principal financial and technical reporting terms which appear from time to time in various publications. Also included is a listing of abbreviations of commonly used terms.

The second pamphlet in this series is the "Nuclear Supplement" which brings together in alphabetical arrangement some eighty terms relating to the electric industry's nuclear development program.

Both of these publications were pre-

pared by the EEI Statistical Committee to provide practical definitions of principal reporting terms relating to the electric industry. Each is intended to serve as a guide for the layman in the general interpretation and preparation of electric utility industry statistical reports. As such, both booklets should be useful reference tools.

GLOSSARY OF ELECTRIC UTILITY TERMS, available from the Edison Electric Institute, 750 Third avenue, New York 17, New York, 84 pp. Price, 50 cents per copy.

NUCLEAR SUPPLEMENT TO THE GLOSSARY OF ELECTRIC UTILITY TERMS, available from the Edison Electric Institute, 750 Third avenue, New York 17, New York, 16 pp. Price, 25 cents per copy.

The March of Events



Utility Companies File Suits

A GROUP of electric utility companies on December 5th filed 12 suits against manufacturers of electrical equipment under the antitrust laws. The group includes 44 companies extending from New England to Indiana on the West and Virginia on the South.

Included in the group are: Boston Edison Company, Blackstone Valley Gas & Electric Company, Brockton Edison Company, Fall River Electric Light Company, Fitchburg Gas & Electric Company, Montaup Electric Company, Western Massachusetts Electric Company. Also, New England Power Company, Merrimac-Essex Electric Company, Narragansett Electric Company, Massachusetts Electric Company, Granite State Electric Company, Lynn Electric Company, Mystic Power Company, and Suburban Electric Company, all of the latter group subsidiaries of New England Electric System.

In the Washington area, they include the Baltimore Gas & Electric Company and the Virginia Electric & Power Company. A spokesman for the Potomac Electric Power Company said that special counsel for the company was studying what, if any, action Pepco would take.

General Electric issued a statement conceding that the investor-owned utili-

ties "have a clear responsibility to take whatever steps they feel are necessary to further the interests of their stockholders and customers." But GE promised a vigorous court battle "to defend the interests of its share owners."

Collectively, the 44-company group represents about one-sixth of the investor-owned electric utility industry.

The suits were brought against Allis-Chalmers Manufacturing Company, General Electric Company, Westinghouse Electric Corporation, and other defendants in the proceedings instituted by the federal government in the U. S. court at Philadelphia last year. These 12 suits were filed in the federal court in New York city on December 4th. They allege that the various defendants participated in price-fixing conspiracies in violation of the Sherman Antitrust Act.

Deepest Gorge Tamed Second Time

NORTH AMERICA's deepest gorge was tamed for the second time recently as Idaho Power Company completed its big Oxbow hydroelectric project in the nationally famed Hell's Canyon reach of the Snake river. Company President T. E. Roach said Oxbow's completion came with start-up of the fourth and last initial generator at this project that harnesses an historic and

PUBLIC UTILITIES FORTNIGHTLY

unique horseshoe bend of the mountain-walled Snake between Idaho and Oregon.

Finish of the 220,000-kilowatt Oxbow project makes Idaho Power's new three-dam development of the Hell's Canyon reach two-thirds complete, with only the already started Hell's Canyon dam remaining. Brownlee dam, 450,000 kilowatts, was completed in January, 1959, as the development's first unit.

Since mid-1961, Idaho Power has taken two major steps in construction of its Hell's Canyon project, which will rise where the gorge is more than a mile deep. The utility has completed a modern steel bridge across the Snake near Oxbow and is pushing a heavy-duty access road 23 miles downstream along steep mountain sides to the project site. Harnessing the Oxbow site required construction of two 32-foot-diameter tunnels to carry water through a towering mountain from the reservoir on one side to the powerhouse on the other.

USBR Invites Bids

BIDS have been invited by the Bureau of Reclamation for a 42-mile section of the Glen Canyon-Curecanti 230-kilovolt, single-circuit transmission line between Shiprock, New Mexico, and Cortez, Colorado, the Department of the Interior reported last month. The Glen

Canyon-Curecanti line, part of the backbone power transmission grid of the Bureau of Reclamation's Colorado river storage project, will be 297 miles long when completed. It will cross some of the roughest terrain in the United States.

Work on the Shiprock-Cortez section calls for clearing right of way, constructing reinforced concrete footings, and furnishing and installing steel towers.

Bids will be opened December 28th in the office of the Assistant Commissioner and chief engineer, Denver, Colorado.

FPC Efficiency Report

THE Tennessee Valley Authority's steam-electric plants had the highest average generating efficiency of the electric systems of the U. S. in 1960, according to a report issued recently by the Federal Power Commission. Of the nine large power systems with overall system heat rates under 10,000 Btu's per net kilowatt-hour, TVA was lowest with 9,540. Next was Duke Power Company, 9,611, followed by American Electric Power Company, 9,619.

Top-rated individual plants for 1960 were: Clinch river (Appalachian Power Company), 8,975 Btu's per kilowatt-hour; Dickerson (Potomac Electric Power Company), 9,014; and Kanawha river (Appalachian Power Company), 9,061.

Florida

Phone Rate Raise OK'd

SOUTHERN BELL TELEPHONE & TELEGRAPH COMPANY has been authorized to increase its telephone rates in Florida by \$1.6 million a year, effective December 1st. The increases, designed to eliminate inequities in charges between cities, will come about by a regrouping of exchanges.

The state public utilities commission, which authorized the rate hike, said the increases would range from five to 75 cents a month in most cities. Some cities and towns with declining or static populations will get slightly lower rates.

Southern Bell, which serves 1.4 million subscribers in Florida, had asked for a gross increase of \$2,192,500 in total annual revenues, but the commission said

THE MARCH OF EVENTS

this full amount was not justified. A phenomenal growth in some exchanges

had rendered old rate schedules obsolete, the commission said.

Illinois

Outdoor Gas Meters Get OK

THE North Shore Gas Company has received authority from the state commerce commission to install outside gas meters on an experimental basis. In a separate action the commission also authorized North Shore to extend gas distribution facilities in the vicinity of Grayslake and Druce Lake.

The test of using meters outside rather than inside the house probably will be

carried out with new customers, Roy E. Jones, utility president, said. The meters are temperature compensated to allow accurate readings in cold weather. Unless compensated, the meters register less gas than was used. The meters will be of the same type now under test by the Northern Illinois Gas Company. North Shore's use of the meters is dependent upon their continued successful performance under the Northern test.

Iowa

Court Gets Gas Rate Case

PLANS to appeal to the state supreme court an order by Webster county district court that it reduce its gas rates in Fort Dodge and make refunds to customers were announced recently by Iowa-Illinois Gas & Electric Company. The company was directed by Judge Ed J. Kelley on October 30th to terminate, effective November 1st, the rates it had been charging for twenty-three months and to make refunds next January to its customers.

The company since December 1, 1959, has been collecting higher rates than are permitted by a city ordinance. It posted bond to assure payment of refunds to

customers if the courts decide rates are higher than justified. The lower court last July ruled that the company was entitled to an increase above rates set by the city ordinance. However, the October ruling said that the company had been collecting rates higher than necessary to provide a fair return. The court ordered the company to refund the portion of its rates ruled excessive.

The appeal will postpone the refunds until after a state supreme court ruling in the case. The company increased the amount of bond by \$314,000 to cover the appeal period. Present rates remain in effect, pending the outcome of the company's appeal.

New Mexico

Utility Tax-paying Plan Approved

PUBLIC SERVICE COMPANY OF NEW MEXICO has received approval of district court in Albuquerque for its plan to pay two-thirds of its 1961 taxes without protest and to lodge a protest on the one-third balance.

The Public Service Company's plan

will allow county treasurers to disburse the two-thirds paid without protest. Payment under protest forces county treasurers to keep the money in a suspense fund until settlement of the dispute.

Public Service is contesting in court the amount of valuation placed on its properties by the New Mexico State Tax Commission.

PUBLIC UTILITIES FORTNIGHTLY

A formal judgment was signed by District Judge Edwin L. Swope directing treasurers of the six counties in which the company pays property taxes to accept the two-thirds payments without

protest and to keep only the one-third in suspense funds. The company, in seeking the court order, said that some of the treasurers doubted the legality of its proposal.

New York

Utilities Sponsor Research Pact

ELECTRIC utility companies in New York state are sponsoring a program to develop atomic fuel elements suitable for high-performance power reactors, the president of the Consolidated Edison Company of New York announced recently. A 20-month, \$1,440,000 contract has been drawn between Empire State Atomic Development Associates, Inc., acting for seven large utilities, and Atomics International, a division of North American Aviation, Inc.

This type of fuel provides the temperature and characteristics necessary for a high-performance sodium-cooled power reactor, Charles E. Eble, Consolidated Edison president, said.

Besides Consolidated Edison, the associate companies include the Central Hudson Gas & Electric Corporation, New York State Electric & Gas Corporation, Long Island Lighting Company, Rochester Gas & Electric Corporation, Orange & Rockland Utilities, Inc., and Niagara Mohawk Power Corporation.

Pennsylvania

New Gas Pact Boosts Income

PRESIDENT James H. J. Tate of the Philadelphia city council recently praised the new 11-year agreement with the United Gas Improvement Company, which will give the city an additional \$2 million a year in revenue, as the "first workable one the city has had." Tate said the agreement tightens municipal and city council control over the Philadelphia Gas Works and increases the gas commission's responsibilities for operation of the plant. City Solicitor David Berger negotiated the gas pact.

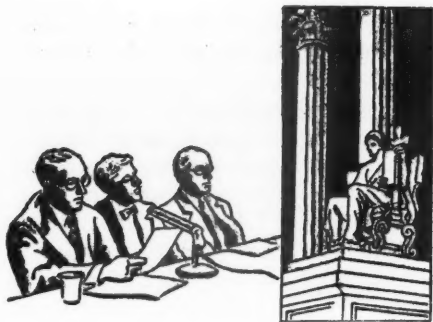
Berger described the agreement as "fair" to UGI, the management company, but one which clearly established city ownership. The agreement, effective January 1, 1962, calls for a \$2 million increase in the city's annual income, raising the figure to \$7.2 million, and provides for immediate payment of \$6 mil-

lion in retroactive income for 1959, 1960, and 1961. The pact also contains a provision that should the gas plant business warrant, the city would be entitled to annual payments over and above the set figure.

City Selling Power Plant

THE state public utility commission has approved sale of Ford City borough's municipal electric power plant in Armstrong county to the West Penn Power Company, Greensburg, for \$675,000. The commission found that the transfer would benefit the borough's customers from the standpoint of "both rates and service."

It was shown that revenue under borough rates last year was \$231,200. Had West Penn's system rates applied customers would have paid only \$187,000 or a net annual reduction of \$44,200.



Progress of Regulation

Trends and Topics

Customer Contributions as Affecting Basis for Depreciation

PROPERTY financed by customer contributions is usually excluded from the rate base, but this does not necessarily mean that it must be excluded from the base on which depreciation is computed. Reported decisions on this question are conflicting, as are the various views on the purpose of a depreciation allowance. The purpose may be to repay the amount invested in property years ago or to reimburse owners for the value of property at the time it is being used up, or it may be to provide a fund to replace the property.

The New Jersey board, in fixing rates for Toms River Water Company, March 7, 1956, said that the Uniform System of Accounts for Water Utilities did not provide for the depreciation of advances or contributions, and in the board's development of a rate base it would follow the Uniform System of Accounts (13 PUR3d 493). But in a later case involving the New Jersey Water Service Company, the board expressed the opinion that an adjustment should be made for depreciation excluded by the water company on property provided by customer contributions and advances. The board said that "depreciation is taken upon all depreciable property including contributed plant." Re New Jersey Water Service Co. Docket No. 6012-906, March 30, 1961.

The Washington commission, in fixing electric rates, excluded customer contributions from the rate base but held that "full allowance should be made for annual depreciation expense accruals so that the property can be replaced when its service life is ended" (13 PUR NS 187). The commission, in an earlier decision, however, had ruled that an electric company should not be allowed to charge depreciation on line extensions constructed by means of customer contributions since the utility had no investment therein (5 PUR NS 204).

Contributed Property Excluded

The Hawaii commission, in an electric rate proceeding, expressed the opinion that depreciation computed against property constructed out of contribu-

PUBLIC UTILITIES FORTNIGHTLY

tions should not be charged to consumers as an operating expense, but should be provided by a charge to Account 265—Contributions in Aid of Construction (33 PUR NS 161).

The Wyoming commission, in authorizing the operation of a community television antenna system, did not have before it the question of depreciation, but the commission said that when it determined the proper rate base it would exclude contributions and would eliminate from operating expenses any depreciation accruals on plant constructed therefrom (7 PUR3d 381, 386). The commission, expressing the same view in another case, said that "equity requires that the company should not be allowed to recover depreciation accruals on plant in which it has no investment" (6 PUR3d 129).

Contributed Property Included

Although the Missouri commission excluded from the rate base of St. Louis County Gas Company property purchased with customer contributions, it said that "our recommendation for an annual depreciation allowance will be based upon the original cost of all property used in public service, so that a sufficient reserve will be set aside to provide for the retirement and replacement of all property so used, including that built from contributions" (49 PUR NS 65).

The North Dakota commission, in fixing rates for Otter Tail Power Company, deducted from the rate base contributions in aid of construction but allowed the expense of maintenance as an operating expense and allowed depreciation on such property as a deduction. The commission said it would be unfair to permit a utility to collect funds from the public in order to build its plant and then to permit the company to demand a return upon the value of such property; but, continued the commission, inclusion of expense of maintenance and depreciation in the operating expenses is permissible; "the company is charged with the cost of maintenance and replacement" (33 PUR NS 301).

The Wisconsin commission years ago expressed the opinion that the entire value of utility property is the proper basis upon which to compute allowance for retirement expense and taxes, notwithstanding the company may be entitled to earn a return only on its equity in the property because a portion of the plant was paid for by consumers. The commission noted that it is the obligation of the company to maintain and replace all physical property (PUR1922E 764).

The Pennsylvania commission, in the Butler Water Company rate case, noted that in the company's claim for annual depreciation no consideration was given to contributions in aid of construction and customers' advances for construction (32 PUR3d 113).

Municipal Plant Assessments

The Wisconsin commission, several years ago in fixing rates for a municipal water plant, said that although the amount contributed by customers as special assessments had been excluded from the rate base, the commission thought it should be included in the base upon which the depreciation requirement was

PROGRESS OF REGULATION

computed (PUR1927B 229). This policy had previously been adopted in fixing rates for another municipal water plant. The commission said that, regardless of the legal question as to whether or not mains could be replaced by special assessment, it was decidedly unsafe to proceed on the assumption that they would be so replaced. Therefore, if the rate schedule was permanently to reflect the benefits resulting from financing by special assessment, the provision for replacement should be made in advance (PUR1925B 43).

Ruling in Tax Case

The United States Supreme Court ruled on the question of customer contributions in a case involving a depreciation deduction from income under the income tax laws. The court upheld a ruling that amounts contributed by customers towards the cost of service extensions, when not refundable, should be eliminated from the depreciable property of Detroit Edison Company for tax purposes (48 PUR NS 146).

Review of Current Cases

Community Growth, Line Loss, and Salaries Affect Electric Rate Determination

THE Connecticut commission granted only half of the rate increase requested by Bozrah Light & Power Company. No difficulty was encountered in the determination of a net investment rate base of \$300,000. A rate of return of 6 per cent was found to be adequate, instead of 6½ per cent as claimed by the company. At the outset the commission declined to take up a contention by opponents of a rate increase that a larger utility could provide more economical service. The company, it was noted, holds a franchise issued by the legislature, and any proposal with respect to revision of the franchise is a matter wholly within the province of the legislature.

Seasonal Rate

The commission denied a request to discontinue the seasonal rate and include seasonal customers in the regular residential rate. The proposal was opposed

by many year-round residential patrons who felt that they would be called upon to subsidize seasonal customers if the seasonal rate were discontinued. The commission did not believe that the company's plan would insure equitable rates for all classes of patrons. However, it concurred in the company's objective to seek a simplified rate schedule. This could be equitably accomplished by providing in the residential rate a clause pertaining to seasonal or short-term service. Such a clause, which the commission authorized, would contain a provision for a minimum charge which would be sufficient to cover all costs of providing service, plus a reasonable margin of profit.

Expense and Revenue Adjustments

The principal differences between the company and protesting patrons arose in connection with the determination of expenses and revenues. In estimating reve-

PUBLIC UTILITIES FORTNIGHTLY

nues for the latter half of 1961, the company failed to allow for growth in the community. Evidence indicated that growth in the Bozrah territory would continue in 1961 at least at the same rate as in 1960. Due allowance was required to be made for this factor and the resultant increase in sales and revenues.

The company estimated line loss for 1961 at 13.85 per cent, as compared with actual line loss of 10.39 per cent for 1960. Increased distribution transformer capacity was blamed for the loss increase. But the commission was not persuaded. Line loss for other electric utilities, regardless of size, appeared to remain fairly stable, averaging between 8 and 10 per cent. The applicant's annual statutory reports indicate a relatively constant line loss for the past five years—an average of 10.5 per cent.

The commission concluded that this latter figure was reasonable for use in this rate proceeding.

Bozrah Light claimed \$13,000 annually for salaries of its general officers. The commission considered this claim excessive, however, and reduced the amount, for rate-making purposes. Citing a prior rate proceeding in which this issue was ruled upon (34 PUR3d 398), the commission allowed \$10,000.

A claim in the amount of \$2,500 for an employees' pension plan was disallowed. While the commission recognized that pension costs are a proper operating expense, under the Uniform System of Accounts prescribed in Connecticut electric companies are required to file a copy of declaration of trust or resolution pursuant to which a pension plan is established. No such documentation was made in this case. The commission therefore determined that the plan had not progressed far enough to warrant the allowance of the claimed expense item. *Re Bozrah Light & P. Co. Docket No. 10033, October 13, 1961.*



Year-end Figures Used in Gas Rate Base And Profit on Property Sale Excluded

IN allowing the Wyoming Gas Company a rate of return of 6.35 per cent on a net investment rate base for its southern division, the Wyoming commission took into consideration the small size of the utility operation involved and its limited opportunity for expansion. Both of these factors, it was observed, tend to increase capital costs.

Also taken into account in the return allowance was the use of an estimated current year-end investment rate base, along with year-end operating figures. In view of the general business and economic conditions now prevailing, the commission regarded this year-end approach as more realistic than the use of figures for a past period.

Profit on Sale of Properties

In 1958 the company purchased some utility properties which it financed by a bond issue. In 1959 it sold the same properties at a substantial profit, though under an instalment payment arrangement extending over a period of twenty years. An order approving the sale directed that the profit be treated as utility income. The company sought to include in its rate base the balance due on this sale. This proposal was rejected.

No reason was apparent to the commission why the company should inflate the purchase price of the property and include it in the rate base. The profit to be made on the sale should be used to reduce

PROGRESS OF REGULATION

rates rather than to increase them. This was the theory of the order approving the sale and requiring the profit to be treated as nonoperating utility income. The profit should inure to the benefit of the ratepayers, the commission declared.

The commission ruled that only the amount paid by the company for the properties should be included in the rate base in this proceeding. The company will be

permitted to earn a return on this amount until the bonds issued to acquire the property have been retired. Any sum received from the purchaser during the interim which the company does not elect to treat as profit—i.e., credit to utility income—should be credited to this rate base item until it is ultimately reduced to zero. *Re Wyoming Gas Co. Docket No. 9400, October 2, 1961.*



Division of Telephone Directory Disapproved

PPOINTING to several serious disadvantages likely to accrue to the public, the California commission denied The Pacific Telephone and Telegraph Company authority to separate its present San Mateo county telephone directory into three directories. The present directory serves 173,841 telephones in the eleven exchanges of San Mateo county. Of this total, 102,500 telephones are in the proposed San Mateo, Millbrae, and south San Francisco exchange group; 60,900 telephones are in the proposed Redwood City, San Carlos-Belmont, La Honda, and Woodside group; and 10,400 telephones are in the proposed Pacifica, Half Moon Bay, Moss Beach, and Pescadero group.

The directory contains 1,160 pages, one-third of which list subscribers and two-thirds of which are devoted to classified business listings and advertising. The company claimed that dividing the directory into three directories, one for each exchange group, would improve directory service. It was also suggested that future growth of the 11-exchange area would require such a substantial increase in the pages of a single directory as to make it unwieldy and cumbersome. Directory advertising rates for the proposed two smaller exchange groups would be lower than the present rates applicable to the entire 11-exchange area.

Public support for the company's proposal centered among businessmen of Pacifica, who desired to confine their directory advertising to the coastal area and who believed that the proposed Pacifica directory would help achieve community identity for that lately incorporated city. Opposition was more widespread and not centered in any group or community. Nevertheless, even in Pacifica a greater number of subscribers were against the split than in favor of it.

Disadvantages to Public Enumerated

The most serious disadvantage which the public would suffer from the proposed division of the directory, the commission declared, was that the directory service to the typical subscriber would be diminished. A substantial community of interest exists throughout San Mateo county, and the boundary lines proposed for the three directory areas appeared to be largely arbitrary.

The commission thought the three directories would be a poor substitute, at best, for the present single directory.

If three directories were established, substantial increases in cost would accrue to the many directory advertisers who would want to retain their present advertising coverage. They would be forced to

PUBLIC UTILITIES FORTNIGHTLY

contract for advertising in all three directories.

Despite the 1,100-odd pages of the present directory, the commission thought it not at all unwieldy and noted that many telephone directories in other parts of California are much larger. However, the order denying the instant application does

not preclude a similar future application should the directory become unduly large. But in the present circumstances, the commission found that the proposed division of the directory would be adverse to the public interest. *Re Pacific Teleph. & Teleg. Co. Decision No. 62629, Application No. 43560, October 3, 1961.*



"Alteration" of Certificates without Hearing

THE Florida supreme court sustained the commission in canceling and re-issuing, without notice or hearing, certificates of carriers of household goods. The original certificates contained no provisions as to domiciling of equipment. The reissued certificates limited domicile to specific points. Although the carriers mentioned that no hearing had been held, the court observed that they had not based their petition for certiorari on this ground but contended only that the commission had no power to modify their certificates except at the time of a transfer. There was no transfer involved in this case.

The court indicated that the carriers never had the right to domicile their equipment wherever they pleased, but were always limited to their original domicile or those granted subsequently by

the commission. Therefore, the commission's order did not alter or impair the certificates. The carriers can still transport household goods as previously authorized. They are merely required to show public convenience when they desire to domicile their equipment at a new location. If public convenience requires the granting of additional domicile points, said the court, there is a clearly recognized administrative avenue of relief open to the carriers. The petition for certiorari was dismissed.

A dissenting opinion observed that the designation of a particular place of domicile certainly is an alteration of a certificate. The dissenting justice thought notice and hearing were required. *Delcher Bros. Storage Co., Inc. et al. v Carter et al. 132 So2d 593.*



SEC Orders Elimination of Minority Stock Interest in Subsidiary Company

THE Securities and Exchange Commission approved a plan filed by Middle South Utilities, Inc., for elimination, through an exchange offer, of the outstanding minority stock interest in its subsidiary, New Orleans Public Service Inc.

Under the plan, Middle South will exchange approximately 124,300 shares of its common stock for the minority

shares of New Orleans Public Service at the rate of $2\frac{3}{4}$ shares of Middle South for each share of New Orleans.

The plan will become effective on the "consumption date," which will be as soon as practicable after the entry by an appropriate court of an order approving and enforcing the plan. On and after the consummation date, the holders of New Orleans common stock will have no rights

PROGRESS OF REGULATION

as stockholders and will be entitled only to receive certificates for shares of Middle South common stock plus dividends thereon declared subsequent to the consummation date, upon surrender of their shares of New Orleans common stock. Upon the consummation date, Middle South will be the owner and will receive a certificate for all of the publicly held shares of New Orleans common stock.

Necessity of Plan

Middle South is a registered holding company. It conducts no public utility operations. Its assets consist chiefly of its holdings of common stock of its four principal subsidiary companies, each of which is a public utility company. It owns 100 per cent of the outstanding shares of common stock of three of the subsidiaries but only 96.82 per cent of the common stock of New Orleans. The remaining shares of New Orleans stock, representing 3.18 per cent of the outstanding shares, are publicly owned.

The commission had previously found that the electric properties of the holding company system constituted an integrated electric utility system and were retainable under the standards of § 11(b)(1) of the Holding Company Act. All of the non-retainable properties of three of the subsidiaries have been divested, but no action has ever been taken with respect to the gas and transportation properties of New Orleans in view of the strong desire of the city of New Orleans for the continued joint operation by that subsidiary of its electric, gas, and transportation services.

In discussing the standards of § 11(b) of the Holding Company Act the commission noted that it has repeatedly held that the existence of a publicly held interest in the common stock of one or more of several public utility companies comprising an integrated public utility system constitutes an undue and unnecessary com-

plexity which, in turn, results in an inequitable distribution of voting power. Elimination of such an interest is required by § 11(b)(2) of the act. As mentioned above the commission had found that the electric properties of the system constituted an integrated public utility system. New Orleans has frequent dealings with other companies in the Middle South holding company system. In view of this fact, the commission held that the elimination of the publicly held stock interest in New Orleans is required under § 11(b)(2).

Fairness of Plan

The "fair and equitable" standard of § 11(e) of the act requires that each security holder affected by such a plan shall receive the equitable equivalent of the rights being surrendered. This requires a consideration of the various financial characteristics of the securities surrendered and received under the plan. The commission pointed out that in comparing the existing position of the affected security holders with that which they would have under the proposed plan, primary emphasis should be placed upon currently effective rights to earnings and dividends as against inchoate rights, such as rights in liquidation.

The valuation need not be reduced to a degree of mathematical certitude. It is enough if the exchange falls within the range of fairness. The commission said that a security holder who receives a new security in substitution for one surrendered may be accorded the equivalent of the rights surrendered without placing a dollar valuation upon the rights surrendered or the securities given in exchange therefor.

The commission found that the public holders of New Orleans stock will receive under the plan shares of Middle South stock having a consolidated book value

PUBLIC UTILITIES FORTNIGHTLY

somewhat greater than the book value of the New Orleans shares. The new shares will have a larger amount of earnings of the Middle South system than the existing earnings in New Orleans. As a holder of Middle South shares, one may expect to receive a somewhat greater amount of future annual dividends than would be received on the New Orleans stock. Furthermore, the Middle South shares are listed on several national stock exchanges

and have an active market, while the New Orleans stock is inactively traded in the over-the-counter market. After considering the various advantages and disadvantages of the plan the commission concluded that it would be fair and equitable not only to the stockholders of New Orleans but also to those of Middle South. *Re New Orleans Pub. Service Inc. et al. Release No. 14533, File Nos. 59-107 et al. October 19, 1961.*



Limited Area Certificate Awarded to Avoid Patronizing Competitor

THE Utah commission granted a motor carrier certificate to a warehouseman despite the applicant's failure to present strong evidence on the question of convenience and necessity. The case was peculiar in the respect that the owner of the warehouse sought authority to operate only to and from the warehouse in a limited area encompassing a 20-mile radius.

Other warehouses in the area had certificates granting statewide motor carrier authority. The applicant, if not granted the limited authority sought, would have

had to employ the services of these competitors.

The presumption was that these competitors would probably meet their obligations if employed, but the competitors' employees, in performing such service, would be in a situation where they might be tempted to divert future business of the owner of the shipment to warehouses of the competitors. Since the only alternative was to compel the applicant to patronize a competitor, the requested authority was granted. *Re Reeves, Case No. 5015, July 14, 1961.*



Unique Freight—Passenger Service Authority Denied

THE Maine commission denied an application by a motor freight carrier for additional authority to provide passenger service. The case had attracted nation-wide interest because it propounded a new and unique method of transportation. The commission thought the method merited additional study as a possible solution to some of the public transportation problems.

What Cole's Express had proposed was to operate two daily round trips between Bangor, Fulton, and Presque Isle, actual-

ly the same schedules the carrier was presently operating. The only change in operation would be the acquisition of two new tractors to replace two of the company's older tractor units. The new units would have a modified cab capable of handling nine passengers, not including the driver of the unit. A preset safety chain or antijackknife arrangement, a company witness testified, was an adequate safeguard for the passengers.

The additional cost in order to handle passengers was estimated to be approxi-

PROGRESS OF REGULATION

mately \$6,215 per year, including the additional cost of the modified tractors, terminal costs at the three points to be served, and cleaning costs. Rates would be the same as the existing common carriers of passengers. Only one passenger handled in each direction per trip would return a profit of approximately \$2,500.

Factors Considered

In determining whether or not such a certificate should be granted, the commission said, it had to take into consideration existing transportation facilities and the effect upon them, public need for the service proposed, ability of the applicant efficiently to perform the proposed service, the conditions of and effect upon the highways involved, and safety of the public using such highways.

The commission was unable to reach the conclusion that the evidence supported a finding of public need for the service. The burden, it pointed out, is upon the applicant to establish by satisfactory proof that the proposed operation would serve a real need. Where no demonstrable need has been shown, an important element is lacking.

The record revealed that bus operations serving the same points were being operated at a loss. Existing common carriers were providing adequate service to meet the needs of the public within the area which the applicant proposed to serve. The granting of the applicant's certificate would have an adverse effect upon existing common carriage. Therefore, the application was denied. *Re Cole's Express, B. No. 54, September 21, 1961.*



Loss on Appliance Merchandising Business Allowed as Sales Promotion Expense

THE Pennsylvania commission permitted Pennsylvania Gas & Water Company to take as an operating expense in a gas rate case an appreciable deficit arising from the operation of its gas appliance sales department. The company contended that the appliance sales department is a necessary adjunct to the production of gross revenues from the sale of gas. The merchandising loss was allowed as a gas sales promotion cost.

Also allowed as an operating expense was the average annual cost incurred by the company during the last five years

under a self-insurance program. The program covers claims for injuries and damages. Since the income available for return under the new rates proposed by the company will provide a rate of return of only 4.66 per cent on a depreciated original cost rate base, there was no reason for the commission to inquire further into the matter of rate of return. The indicated rate could not be said to be unreasonable or excessive. The proposed rates were approved. *City of Scranton v Pennsylvania Gas & Water Co. Complaint Docket No. 17447, October 2, 1961.*



Commission Rejects Proposal to Accord 75 Per Cent Weight to Reproduction Cost

THE Arizona commission, in granting a combined gas and electric company a rate increase, rejected the company's

proposal that a 75 per cent weight be given to reproduction cost less depreciation. Rate base findings are and must be

PUBLIC UTILITIES FORTNIGHTLY

the result of the commission's judgment and discretion after weighing all relevant factors.

Establishment of a fair value rate base is the prerogative of the commission.

On the rate base found, the commission concluded that returns of 5.78 per cent on the electric property and 6.98 per cent on the gas property were reasonable.

Deferred Taxes

The company had employed since 1954

the liberalized method of determining the deduction for depreciation for income tax purposes under § 167 of the Internal Revenue Code of 1954. It had followed the practice of normalizing for the amounts of deferred taxes. The commission allowed the company to do this, but made it clear that it was not establishing a precedent to be followed in other cases. *Re Tucson Gas, Electric Light & Power Co. Docket No. 10011-E-1081, Decision No. 33459, October 18, 1961.*



Water Company's Rate Case Expense Considered Excessive

THE Connecticut commission, in granting a rate increase which would produce a return of 6.2 per cent on the investment rate base found reasonable, reduced a water company's claim for legal and accounting fees. The commission noted that it had the responsibility to insure that ratepayers should not be obliged to absorb excessive expenses. Such expenses must be reasonable and in line with those charged in proceedings of similar complexity.

Accepted principles in fixing professional fees, pointed out the commission, include the following: (1) time, labor, skill, novelty, and difficulty of the questions involved; (2) customary charges for similar services; (3) amount involved in the controversy and benefits resulting to the client from the services; (4) contingency or certainty of the compensation; and (5) character of the employment.

The application of these standards to the facts of the instant proceeding appeared to weigh on the side of more conservative fees than had been requested. The company had claimed a legal fee of \$4,400 and an accounting fee of \$1,000.

Confronted with lesser fees in other cases, the company had responded that its case could not have been presented properly for lesser fees. The fact is, answered the commission, that other comparable cases had been presented in proper form at much less expense.

The commission concluded that \$2,000 legal expense and \$750 accounting expense should be allowed for rate-making purposes. The amount was to be amortized, with other items includable in rate case expense, over a five-year period.

Original Cost Study

Administrative and general expenses of \$22,692 claimed by the company included \$1,200, representing the expense of an original cost study of the company's plant in accordance with the commission's Class A Water System of Accounts. The commission felt that the original cost study was clearly an extraordinary and nonrecurring expense, and, for rate-making purposes, had to be amortized over a five-year period. *Re Ridgefield Water Supply Co. Docket No. 10009, October 3, 1961.*



PROGRESS OF REGULATION

Parcel Delivery Service by Taxicabs Upheld

AFTER the furor created by a commission decision that it was illegal for a taxicab to be used for the purpose of transporting articles, other than passengers, and to refuse to transport prospective passengers while so doing, the District of Columbia commission re-examined its stand and held that taxicabs could engage in small parcel delivery service, if there was a public need for such service and if the service was subordinated to the primary obligation of the industry to transport passengers.

The commission's investigation disclosed that there were isolated exceptions to the typical messenger service engaged in by the taxicab industry. A small number of operators had actually, although sporadically, used their passenger vehicles for the hauling of goods, wares, and merchandise, as contrasted with messenger service involving messages and small parcels.

It was the opinion of the commission that there was a valid distinction between a pickup and delivery service involving

messages and small parcels and the transportation of goods, wares, and merchandise. The transportation of the latter should properly be left to motor carriers authorized to transport general commodities either in ordinary freight service or express service in vehicles designed for such purpose, the commission pointed out. No need for such type of transportation by taxicabs had been shown, nor would it be authorized if requested.

A bona fide taxicab service was defined as a service for the transportation of passengers upon call and demand. However, this did not prevent taxicabs from engaging in a limited messenger service involving the pickup and delivery of messages and small parcels under rules and regulations prescribed by the commission, if a public need existed. This would by no means constitute a dual operation whereby a taxicab could operate as a common carrier of passengers and as a common carrier of property as and when it saw fit. *Re Taxicab Delivery Service, P.U.C. No. 2942/328, October 17, 1961.*



Excessive Profits of Affiliated Suppliers Disallowed in Telephone Rate Increase

THE New York commission granted General Telephone Company of Upstate New York, Inc., additional gross operating revenues of \$310,000, though the company had proposed an increase of nearly \$800,000. Upstate serves about 50,000 subscribers in eleven counties through 40 exchanges. A large portion of the service territory is mountainous and wooded, sparsely populated, and subject to severe winters. In 1960 the company's toll revenues accounted for about 41 per cent of its total operating revenues.

In support of the rate increase, Upstate

pointed to wage increases granted since the last rate proceeding in 1958, the urgent need of capital outlays for new construction, and substantial nonproductive expenditures in 1961 for relocation of plant in connection with highway construction. Additionally, the company is preparing, at considerable cost, a continuing property record to conform to the commission's Uniform System of Accounts.

Estimated results of operations for the test year 1961 were submitted, as well as the actual results for 1960.

PUBLIC UTILITIES FORTNIGHTLY

Transactions with Affiliates

Hearings held during June of this year dealt, for the most part, with the relations between Upstate and its affiliates. The burden of proving the reasonableness of prices charged by affiliates is on the utility, the commission observed. Upstate's contention that the prices charged by its manufacturing and sales affiliates are reasonable was based on the claim that such prices are fixed in an open and competitive market. The commission thought the record did not show that the market for the products of the affiliates is either open or competitive. About 85 per cent of the market is captive to the Bell system, it was noted, and, of the remainder, 30 to 36 per cent has been captive to General Telephone & Electronics and its manufacturing affiliates.

The greatest proportion of the sales made by the Leich companies has been to GT&E telephone companies. Between 1951 and 1959, Leich earned a weighted average return of 48 per cent on its average book equity. The commission indicated that if the telephone companies, as a single bargaining unit, had been free to purchase their requirements from the lowest bidder on a truly competitive basis, they could have obtained them at prices lower than those charged by Leich. Instead, said the commission, the benefits that might have accrued to the telephone companies and their subscribers have been pocketed by the parent.

Some of the foregoing was held to be true with respect to Automatic Electric Company, another equipment supplier, and to transactions between Upstate and other affiliated companies and the directory company. The latter earned 40.2 per cent on its equity capital in 1957, 34.7 per cent in 1958, and 32.4 per cent in 1959. Since Upstate failed to demonstrate the reasonableness of the prices charged by its affiliated manufacturing, sales, and

directory companies, it was necessary to make appropriate adjustments.

Capitalized Profits Excluded

Moreover, since Upstate failed to offer evidence to show what a reasonable return on average common equity should be for companies such as Leich, Automatic Electric, and the directory company, the commission looked to other more general evidence in the record to supply an objective yardstick for measuring a reasonable return. Profits in capitalized purchases from other affiliates were not of such an amount as to be significant. An exhibit relating to the period 1951 through 1959 indicated that earnings of Moody's 125 industrials ranged from 15.9 per cent in 1955 to 10.5 per cent in 1958 and averaged 13.6 per cent. Using such earnings as a yardstick, the commission adjusted Upstate's rate base to account for excess profit fixed at \$415,000 in the plant accounts at December 31, 1961, with accrued depreciation of \$67,000.

The same general yardstick was applied to expensed purchases from affiliated suppliers.

Upstate's revenues were similarly adjusted to reflect excess profits of the affiliated directory company.

Attrition Allowance Denied

After making necessary adjustments, the commission calculated that the proposed rate increase would result in a rate of return of 8.31 per cent, while existing rates would afford but 5.32 per cent. The former was held to be excessive and the latter inadequate. Somewhat more than one-third of the requested increase was found to be adequate.

The company sought an allowance in the rate of return for attrition. Pointing to the increasing investment per station, the company contended that the otherwise allowable rate of return should be

PROGRESS OF REGULATION

increased by a percentage equal to the estimated average yearly percentage of increase in net plant investment per station for the five-year period ending December 31, 1963.

This contention assumed that the company's net income per station would remain constant. However, no proof sustained this assumption. On several counts, it appeared to the commission that net income per station will not remain static. A contemplated improvement in the quality of service will tend to produce additional revenues. An increase in intercom-

pany toll calls per station is indicated. The expected replacement of old plant is likely to result in greater efficiency and economy of operations.

The commission rejected a measure of a reasonable return, proposed by one witness for the company, based on earnings on common equity of other companies, including industrials. It was observed that no specific studies of such companies were made or evidence of their comparability offered. *Re General Teleph. Co. of Upstate New York, Inc. Case 21529, October 31, 1961.*



Purchase of Gas Pipeline Authorized Despite Suggestion of Coercion

THE Federal Power Commission authorized the sale of a 14-mile pipeline in Mississippi by one pipeline producer to another. The proposed purchaser owned gas wells in the area but was unable to get its gas to market because the owner of the pipeline, though having ample capacity, refused to transport the producer's gas. Besides refusing transportation service, the owner was draining the purchaser's wells. In order to get its gas to market and thereby retrieve some of the capital invested in its wells, the purchaser entered into an agreement to purchase the pipeline and transport the seller's gas production at a modest charge.

Detecting unfair coercion on the part of the seller, the presiding examiner had denied the application for authority to purchase. Rather, he suggested that the purchaser invoke § 7(a) of the Natural Gas Act to compel the owner to transport the purchaser's gas to market at a cost-of-service charge. He noted, moreover, that no application had been submitted by the seller for authority to abandon service under § 7(b).

The commission reversed the examiner. Section 7(a), it was pointed out, does not permit the commission to order a natural gas company to accept delivery of a producer's gas and transport it to market. The statutory power to direct a company to extend or improve its transportation facilities must be read in conjunction with the purpose of selling gas for local distribution, as provided in § 7(a).

The commission considered justifiable the purchasing producer's plan to acquire the line in order to move its gas. Actually, the plan amounted to a salvage operation by which the buyer sought to reduce its losses.

The purchaser had invested nearly a million dollars in wells, which would not be recovered as matters stood. By purchasing the pipeline for \$200,000 and marketing its gas, the purchaser would be able to reduce its losses to about \$471,000. Additionally, gas which might otherwise be shut in or wasted would be made available to consumers. *Re Tarpon Oil Corp. et al. Docket Nos. CI60-582, CI60-583, October 30, 1961.*

PUBLIC UTILITIES FORTNIGHTLY

Right to Discontinue Service for Nonpayment Not Waived by Telephone Company

A JUDGMENT in favor of a telephone subscriber for damages because of discontinuance of service was reversed by the supreme court of Alabama on the grounds that the company had the right to discontinue for nonpayment and had not waived this right. The company, upon acquisition of the property from another company in 1955, changed the billing rule to require that bills be paid in advance instead of being paid for the past month. The complaining subscriber, however, continued to pay for the past month instead of paying in advance, although he received reminders of past due bills.

The company disconnected his telephone in May, 1959, after sending the requisite notice of intent to discontinue service if full payment were not made. The lower court held that the company had waived its right to discontinue service because it did not discontinue the first month the subscriber was in arrears in January, 1956, and having waived the right it was liable for damages for disconnecting the telephone because the May, 1959, bill was not paid in advance.

The supreme court noted that a utility is not liable for damages caused by discontinuance of service to a delinquent subscriber. A utility is authorized to change or alter a service regulation. This authorization includes the change in the

instant case in requiring the bill to be paid in advance. An applicable statute expressly recognizes the right of a utility to discontinue service for nonpayment of charges.

The court, after reviewing the arguments and citations to various cases, concluded that there was no place for the doctrine of permanent waiver or estoppel in this case. The rules of the commission and the tariff provide that the company may discontinue service to a delinquent customer, and each time a patron is delinquent the utility is presented with an option, either to discontinue service or keep furnishing it and give the patron an opportunity to get his payments current.

It was said to be common knowledge that most places of business and residences are served by some utility, and there is a probability that some subscribers will be on vacation at bill paying time, or mislay the bill, or forget it, or be temporarily financially unable to pay the bill. The court said that to suggest or hold that the utility must discontinue service immediately upon the bill becoming delinquent, or by inaction to have perpetually waived the right to discontinue, appeared neither ethical, practical, nor in the best interests of either the subscribers or the utilities. *Coosa Valley Teleph. Co. v Martin*, 133 So2d 505.



Integrated Gas System Costs Spread Over All Classes of Customers

THE West Virginia commission authorized only part of a rate increase of \$148,000 requested by Cabot Corporation, which is principally a manufacturer of carbon black and other pigments but which devotes a small portion of its over-

all operations to utility gas service in several counties of West Virginia. The commission set forth an allowable schedule of rates which it declared to be reasonable and sufficient to enable the company to meet operating expenses and earn a

PROGRESS OF REGULATION

fair return on property used in utility operations.

Neither the specific amount of additional revenues allowed nor the rate of return authorized was indicated.

Since the company's gas system is integrated, the commission assigned the cost of purchased gas and cost of gas storage transactions to all classes of customers, including wholesale customers, but excluding customers served from isolated wells. The company operates a number of producing wells which are not connected to its production system because gathering

lines for them are not economically feasible. Sales revenues from such wells were credited to the cost of production. This had the effect of distributing the costs and revenues involved with the wells to all remaining classes of customers.

In determining the company's cost of service for the purposes of this proceeding, the commission recognized the discontinuance of a substantial sale to a pipeline, even though the sale was not actually discontinued until nine months after the end of the test period. *Re Cabot Corp. Case No. 5299, October 27, 1961.*

Other Recent Rulings

Certificate Not Required. The United States district court held that the establishment of an off-track freight depot within a railroad's terminal district to and from which it would provide truck service was not an extension of a "line of railroad" so as to require a certificate of convenience and necessity. *Long Island R. Co. et al. v New York C. R. Co. 197 F Supp 21.*

Grandfather Permit. The United States district court stated that, in the event a grandfather permit does not properly reflect the scope of a carrier's grandfather operations, the carrier's remedy lies in petitioning the commission to reopen the grandfather proceedings. *Kroblin Refrigerated Xpress, Inc. et al. v United States et al. 197 F Supp 39.*

Injunctive Relief Barred. The United States district court held that, under the anti-injunction provisions of the Norris-LaGuardia Act, railroads were barred from obtaining injunctive relief against a strike called to prevent the railroads from complying with a contract regarding

combination and consolidation, which contract has been approved by the Interstate Commerce Commission. *Texas & New Orleans R. Co. et al. v Brotherhood of Railroad Trainmen et al. 197 F Supp 348.*

Traffic and Income Losses Not Prime Factors. The United States district court held that traffic and income losses by existing motor common carriers resulting from the granting of another motor carrier's request for extended operating authority is not a violation of the National Transportation Policy so as to afford grounds for denying the application where there has been a showing of inadequate service and a need for the requested service. *Atlanta-New Orleans Motor Freight Co., Inc. v United States et al. 197 F Supp 364.*

Construction of Commodity Descriptions. The United States district court held that the primary responsibility for interpreting certificates and determining what items fall within a commodity description contained in a certificate rests

PUBLIC UTILITIES FORTNIGHTLY

with the Interstate Commerce Commission, not with the courts. *Ace Lines, Inc. v United States et al.* 197 F Supp 591.

Consideration by Full Commission. The United States district court held that the full Interstate Commerce Commission could validly delegate to one of its divisions, for decision, an application for permission to discontinue certain passenger trains, since the commission has the right to prescribe rules of practice with an eye to limiting consideration by the full commission to those matters which are of general transportation importance. *City of Philadelphia et al. v United States et al.* 197 F Supp 832.

Mobile Home Transportation. The Arkansas supreme court reversed the commission's denial of authority to transport mobile homes upon a showing that existing service was so inadequate that dealers and owners of mobile homes had to resort to the use of unlicensed or "wildcat" operators. *National Trailer Convoy, Inc. v Chandler Trailer Convoy, Inc.* 349 SW2d 672.

Consignee Bound by Tariff. The Maine supreme judicial court held that a railroad was entitled to recover the difference between undercharges and applicable freight tariffs from a consignee of goods shipped "freight charges collect" since both the consignee and consignor are bound by applicable tariffs and may not deviate therefrom. *Maine C. R. Co. v Fred I. Merrill, Inc.* 174 A2d 112.

Intrastate Rate Control by ICC. The Utah supreme court pointed out that regulation of freight charges within a state by the Interstate Commerce Commission constitutes an intrusion into state

affairs which cannot be justified merely because of a disparity or inequality in rates, but it could be justified where there is undue, unreasonable, or unjust discrimination against, or an undue burden upon, interstate commerce. *Thermoid Western Co. et al. v Union P. R. Co. et al.* 365 P2d 65.

Not Unreasonable Discrimination. The Illinois commission held that an increase in telephones of 5 to 10 per cent beyond the maximum number of telephones in a designated exchange group did not constitute such an unreasonable discrimination as to necessitate granting the company general authorization to increase or decrease rates, between rate cases, in those exchanges which increase or retrogress from one group to another. *Re General Teleph. Co. of Illinois, No. 47347.*

Gas and Electric Bond Issue. In authorizing a \$15 million bond issue proposed by Rochester Gas and Electric Corporation in connection with its construction program, the New York commission approved a provision which will restrict redemption with lower cost debt money for a period of five years. *Re Rochester Gas & E. Corp. Case 21895, October 24, 1961.*

Extended-area Telephone Service. The New York commission approved the New York Telephone Company's rate schedules relating to the introduction of an extended-area service plan for the Albany metropolitan area, where the plan was deemed preferable to further extensions of local service, where it would satisfy the community of interest, and where the public in general favored the plan. *Re New York Teleph. Co. Case 21785, October 25, 1961.*

Industrial Progress



Coal Slurry Fired Successfully At Utility Plant

Successful firing and burning of coal slurry in a Babcock & Wilcox Cyclone Furnace Boiler was commercially demonstrated recently for the first time at Jersey Central Power & Light Company's E. H. Werner generating station, South Amboy, New Jersey.

Coal slurry is a fuel consisting of finely crushed coal mixed with enough water to make a fluid. At this plant, it is being burned directly as it would be received from a pipeline. Such a pipeline is now being proposed for the East Coast.

Until now, coal slurry pumped through a pipeline could be used as fuel, but only at the cost of expensive drying and dewatering pretreatment. The demonstration firing eliminates several years of joint research by The Babcock & Wilcox Company, Consolidation Coal Company, and Texas Eastern Transmission Corporation.

The success of this demonstration indicates the possibility of stabilizing transportation costs over a long-term contract period and eliminating expensive coal handling equipment such as barges, docks, conveyors, railroad sidings, bunkers and pulverizers. A capital investment in coal handling equipment usually runs between 7 and 10 per cent of total plant costs—about \$3,500,000 in a 500,000 kw generating station.

Complete test results of the direct firing of coal slurry at Werner Station have not yet been tabulated, according to John Logan, Jersey Central's vice president in charge of Engineering Operations and Generation, who said "this demonstration has proved that slurry can be burned under operating conditions."

The fact that it can be fired in a cyclone furnace just as it is received from a pipeline (coal and water mixture) suggests coal slurry will be an

economically attractive fuel for the electric generating industry.

The slurry used in the demonstration was transported through an existing pipeline running from Consol's Cadiz, Ohio mine to Cleveland Electric Illuminating Company in Cleveland. Since a coal pipeline to the East Coast proposed by Consol and Texas Eastern is not yet in existence, the fuel was shipped the rest of the way by barge.

Perhaps the most important consideration in the coal slurry system is that of direct firing of the fuel, which contains over 30 per cent water when received. Previous operations had to use extensive dewatering and coal drying facilities in order to prepare the mixture for burning.

The Babcock & Wilcox Cyclone furnace arrangement fires coal slurry direct, with no auxiliary fuel needed. The mixture is brought into the front of the Cyclone through a simple pipe and spray nozzle. The fuel comes in at low pressure, while hot air at extremely high temperature flows in, around and behind the nozzle. This vaporizes the water and accelerates the coal particles in the mixture. Ignition and burning at over 3000 degrees Fahrenheit occurs within 1/100th of a second.

While many existing and all new Cyclone furnaces can operate on slurry with no auxiliary dewatering equipment, it is also possible to add equipment to remove water, thus allowing the use of coal slurry in present-day pulverized fuel-fired plants.

Budelman Marks 10th Anniversary

IN October, 1961, The Budelman Electronics Corporation completed its first decade in the communications industry. The company was formed in 1951 by a group of engineers and executives who, at that time, had worked together for many years. They

had collectively pioneered and been instrumental in the development of several important items in the carrier and broadcasting fields.

Since its inception, the company has experienced steady growth and has achieved recognition from industrial and government agencies as a "specialist" in the field of communication equipment.

The activities of Budelman embrace two general categories.

Budelman is an engineering and manufacturing organization specializing in the design and production of communication equipment. However, specialized systems engineering is also an important facet of Budelman activity.

A standard line of equipment of the company's own design is manufactured for sale to Public Utilities, telephone companies, broadcast networks, police departments and various government agencies. Basic designs are subject to variations to meet the special requirements imposed by local conditions of any particular installation. Principal equipment sub-classifications are microwave, telephone carrier, frequency meters, wireless microphone, radio paging and point-to-point communication equipment.

In addition to these standard lines, Budelman has developed and manufactured many specialized devices for some of the major electronic companies—both here and abroad.

Air Conditioning Plant Nears Completion in Hartford, Conn.

REFRIGERATING equipment for the nation's first gas utility central station air conditioning system was rigged into place in November in the new \$4½ million plant of The Hartford Steam Company, subsidiary of The Hartford Gas Company, Hartford, Conn.

(Continued on page 16)

The system will provide chilled water for cooling and steam for heating to a large section of downtown Hartford, including the city's \$40 million Constitution Plaza urban redevelopment project.

The first equipment to be set in place consisted of two Carrier centrifugal water chillers each with a cooling capacity of 1,500 tons. A third water chiller of 3,000 tons capacity will be installed prior to the opening of the plant in May. Additional machines will be installed at a later date which will provide a total cooling capacity of 11,000 tons.

The system was designed by See-lye, Stevenson, Value & Knecht, New York City consulting engineers.

Dr. Peter Friedlander Joins Gibbs & Hill, Inc.

D. B. SLOAN, president of Gibbs & Hill, Inc., New York consulting engineers, announces that Dr. Peter H. Friedlander has joined the firm as supervising system engineer. He was previously manager of the Pro-

gramming Department, Computer Control Division of Thompson-Ramo-Wooldridge, Los Angeles, California where he specialized in industrial control and programming supervision and in computing problems in aircraft and missile development. He also has experience in the areas of computer control of power plant start-up, operation and shut-down, as well as economic load dispatching.

New American Meter Bulletin Describes Reliance Gas Filters

SPECIFICATIONS on Reliance Gas Filters for high pressure service in domestic, commercial and industrial applications are described in new Bulletin 160, just published by American Meter Company.

Three type filters are described: Type A for high pressure service such as farm tap installations; Type B for individual appliances and general use on house service lines in dust areas; Type C for distribution and industrial service where large volumes occur. Cutaway illustrations of all three type filters show internal de-

sign features. In addition, this bulletin gives full information on dimensions, weights, capacities, working pressures.

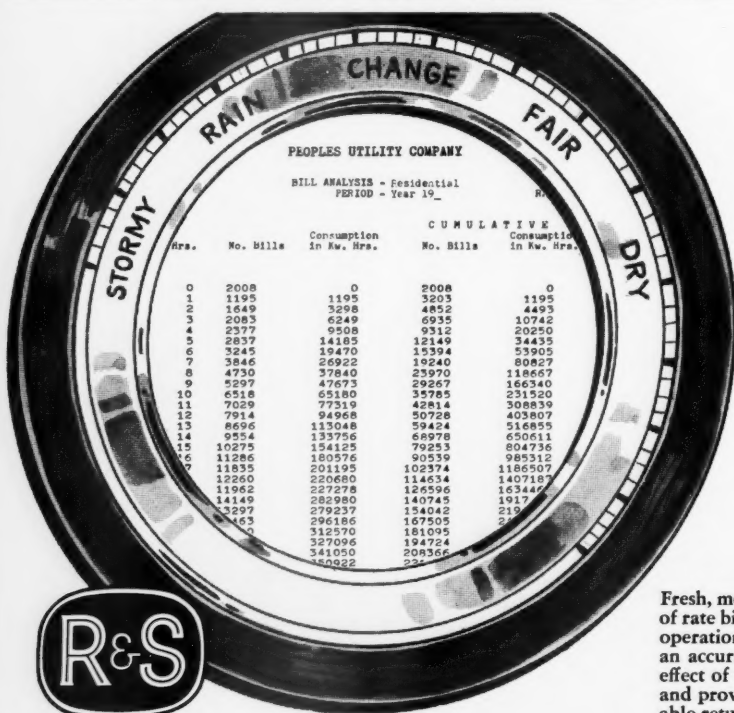
Complete details are available writing to the Advertising Department, American Meter Company, Payne Avenue, Erie 6, Pennsylvania.

J. S. Morgan Appointed New Post at A-C

J. S. MORGAN has been appointed manager of marketing, Power Equipment Division, according to an announcement by R. M. Casper, general manager of the division and vice president of Allis-Chalmers.

The Power Equipment Division has five departments at Allis-Chalmers West Allis plant as well as plants in other states.

Mr. Morgan had been director of domestic sales for the Industrial Group since 1957. Prior to that he had been director of utility sales, held various sales, engineering, managerial posts between 1937 and 1954 when he became director of utility sales.



R&S

RECORDING & STATISTICAL CORPORATION

Public Utility Data Processing Division

100 SIXTH AVENUE • NEW YORK 13, N.Y. • WOrth 6-2700

Here's a reliable
BAROMETER
for sensing changes
in economic weather

Fresh, monthly reports prepared by the "One-Step" method of rate bill analyses give a comprehensive picture of current operations. The cumulative information in the reports is an accurate gauge for management to help determine the effect of inflationary and other pressures on existing rates and provide the basis for adjustment to maintain a reasonable return on a sound capital structure.

The "One-Step" method of rate bill frequency analysis not only provides faster, more accurate reports, the cost of compilation is lower than if produced by your company. Besides, the complete job is done at R & S's data processing center and does not involve your personnel. It will pay you to investigate "One-Step" for your company. Write Dept. U-8 for full information without obligation.

Nation's Largest Gas Turbine Placed in Service by Philadelphia Electric

The largest gas turbine in the United States, a 22,000-hp unit for base or peak load electric power generating, has been placed in service by Philadelphia Electric Company at Barbadoes Island, about 15 miles from Philadelphia, according to an announcement by Westinghouse Electric Corporation.

Built by Westinghouse's steam division, Lester, Pa., the gas turbine is completely remote-controlled with all the starting, synchronizing, loading and stopping operations performed from the Barbadoes Island station's main control room, some 200 yards away.

C. Twombly, manager of the Westinghouse small gas turbine and gas turbine department, said, "This station was designed as a minimum cost power plant for unattended operation. A side inlet and side exhaust on the turbine permit low cost foundation and minimum building height. A smaller frame size generator is made possible by employing the hollow core concept like that used on the larger hydrogen-cooled generators. A monoblock design with set-down space outside the building reduces building structure costs."

One feature included for peak load duty is the elimination of cooling water and the attendant corrosion problems during extended periods of idle time when the machine is not required. The lubricating oil is cooled by an air-to-oil cooler, and the generator is an air-cooled type. The turbine is equipped to burn either natural gas or qualified # 4 fuel oil. Adequate fire suppression is provided to classify the installation in a commercial-residential area.

"Where good soil loading is provided," Mr. Twombly pointed out, "the installed cost of a complete plant is less than \$100 per kilowatt. This low cost station provides electric utilities with a peak sharing power plant in the largest package installed to date."

Dura Corporation Announces Acquisition in Business Machine Field

THOMAS SMITH, president of Dura Corporation, Oak Park, Michigan, and Paul E. Becking, president of Automatic Writing Systems, Inc., announce the acquisition by Dura of Automatic Writing Systems, Inc., 226 Woodward Ave., Detroit.

The name of the acquired company has been changed to Dura Business Machines, Inc., and will be operated as a subsidiary of Dura Corporation.

Dura Business Machine is engaged in the engineering, manufacturing and distribution of ultra speed electro-mechanical writing and data processing peripheral equipment. Dura Business Machines has initiated a program for the establishment of sales and service offices nationally.

Weston Announces New Edition Of Industrial Analyzers Bulletin

INDUSTRIAL Analyzers—Bulletin No. 06-207—describes the features and specifications of four models of precision analyzing instruments by Weston Instruments Division, Daystrom, Incorporated.

The testers, all designed as portable instruments, are completely described. Included are the Model 785 multi-purpose, 28-range tester; Model 639, a complete a-c power analyzer; model 779, a compact 26-range analyzer for ac and dc; and Model 799, a pocket-size insu-

(Continued on page 18)

BENCH MARKS FOR PUBLIC RELATIONS?



The lack of "yes" or "no" answers in measuring public relations results makes it hard to evaluate the effectiveness of this important work. Often, Commonwealth's public relations consultants can help establish bench marks for measuring and guiding company plans and programs.

For your present or future public relations activities, our specialists are available to help design programs or review proposed plans involving:

Advertising and Publicity	Government Relations
Community Relations	Stockholder Relations
Customer and Dealer Relations	

Commonwealth

SERVICES INC. ASSOCIATES INC.
Management Consultants Professional Engineers



New York, N. Y. Jackson, Michigan

Houston, Texas Washington, D. C.



WHAT'S IN A TITLE!

Executives of local utilities frequently are assigned responsibility for management in several diverse areas of operations. Are you faced with this problem of wearing several hats at one time?



If so, you and your associates will be glad to learn that you can obtain a basic understanding of the non-technical aspects of utility operations.

Write today for information about the P.U.R. Guide. Join over 240 other gas, electric, water and telephone utilities which have participated in this program, created specifically for you.

The **P.U.R.** Guide

332 Pennsylvania Bldg.
Washington 4, D. C.

INDUSTRIAL PROGRESS—(Continued)

lation tester. Specifications include data on accuracy of various models in all ranges, applications, and available accessories.

For a copy of the new bulletin, "Industrial Analyzers," No. 06-207, write: Weston Instruments Division, Daystrom, Incorporated, 614 Frelinghuysen Avenue, Newark 14, N. J.

New Atom Fuel Sought By Atomics International

A \$1,440,000 contract to accelerate the promising development of a new type of nuclear power reactor fuel was announced recently by the Empire State Atomic Development Associates, Inc., (ESADA) and Atomics International, a division of North American Aviation, Inc.

Under a 20-month contract, Atomics International will develop techniques for processing and fabricating power reactor fuel elements of uranium monocarbide. This type of fuel provides the temperature, heat production, and burn up characteristics necessary for a high performance sodium cooled power reactor. The work contemplates use of advanced fuel elements in such a reactor.

In making the announcement, Ernest R. Acker, president of ESADA and chairman of the board of Central Hudson Gas & Electric Corporation, stated that good progress is being made on alternate reactor concepts being studied by General Atomic, a Division of General Dynamics Corporation, and General Electric under other ESADA contracts.

Mr. Acker hailed this third major step in New York State's nuclear power program. "It is the objective of the New York electric utility companies to demonstrate economically competitive nuclear power in New York state before the end of the present decade in a large plant." ESADA members which serve 98 per cent of the power customers in New York State include: Central Hudson Gas & Electric Corporation; New York State Electric & Gas Corporation; Long Island Lighting Company; Consolidated Edison Company of N. Y., Inc.; Rochester Gas & Electric Corporation; Orange & Rockland Utilities, Inc., and Niagara Mohawk Power Corporation.

Atomics International is the leading company developing the sodium graphite reactor concept for the Atomic Energy Commission. The company has operated an experimental sodium reactor since 1957 and

is completing a sodium reactor test for a 75,000 kilowatt central station nuclear power plant in Nebraska.

CompuDyne Announces New Monitoring Systems

TWO new monitoring systems from CompuDyne Corporation, Latrobe, Pa., provide visual and audible alarms either locally or by remote control. The local system, called Visualer, a transistorized annunciator system that continuously monitors alarm conditions on any type equipment. The remote control monitoring system, named Alertra, uses a single channel of any communications medium.

Mounted on any control panel, Visualer instantly attracts the operator's attention to off standard conditions for any equipment or process controlled through the panel. CompuDyne's Visualer continuously monitors any process variable, indicating visually and audibly all malfunctions. Typical applications include power generating stations, gas and petroleum pipe line and pumping station water works, filtration and sewerage disposal plants and nuclear reactors.

With Alertra, the transmitter automatically and continuously scans a number of points, encodes the information (yes or no) on a time shared basis and actuates a relay voltage for keying any transmission medium.

At the receiver, the decoding unit provides electrical signals or energizes relays which, in turn, are used to display the condition of each point at the transmitting end, or can be used to operate printout devices interlock circuits.

EEI's New Color Film Presents Benefits of Good Lighting

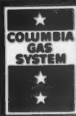
EDISON Electric Institute has announced the availability of a new 16 minute, 16 millimeter film in sound and in color entitled, "You And Eye." This dramatic film deals with the benefits of good, effective lighting in the home, in schools, offices, factories, etc.

The film discusses the eight-year research program, the results of which are the basis for the lighting levels recommended by the Illuminating Engineering Society.

A free, descriptive folder giving complete details on "You And Eye" or prints of the film may be obtained from the Sales Division, Edison Electric Institute, 750 Third Avenue, New York 17, N. Y.

Columbia Gas serves a very special part of America

The seven states where
Columbia serves use
one fifth of all the nat-
ural-gas consumed in
the United States.



THE COLUMBIA *Gas* SYSTEM, INC.

COLUMBIA GAS SYSTEM SERVICE CORPORATION
COLUMBIA HYDROCARBON CORPORATION
120 EAST 41st STREET, NEW YORK 17, N. Y.

CHARLESTON GROUP: UNITED FUEL GAS COMPANY, 1700 MacCORKLE AVENUE, S.E., CHARLESTON, WEST VIRGINIA. COLUMBUS GROUP: THE OHIO FUEL GAS COMPANY, 99 NORTH FRONT ST., COLUMBUS 15, OHIO. PITTSBURGH GROUP: THE MANUFACTURERS LIGHT AND HEAT COMPANY, 800 UNION TRUST BLDG., PITTSBURGH 19, PA.

throughout its service territory—in Ohio,
Pennsylvania, West Virginia, Kentucky,
Virginia, Maryland and southern New
York — natural gas continues to be the
preferred fuel for home and industry.



Be sure your cards and
packages are signed, sealed
and delivered with

Christmas Seals To Fight TB

ANSWER YOUR CHRISTMAS SEAL LETTER TODAY



PROFESSIONAL DIRECTORY

• This Directory is reserved for engineers, accountants, rate experts, consultants, and others equipped to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, financing, design, and construction.

SUPPORTABLE EVIDENCE

For whatever purpose, American Appraisal provides authoritative valuations and experienced interpretation that is generally acceptable throughout the world.

AMERICAN APPRAISAL COMPANY

SINCE 1896

Home Office: 525 E. MICHIGAN ST.
MILWAUKEE 1, WISCONSIN



BECHTEL CORPORATION

Engineers and Builders for Industry

ENGINEERING • CONSTRUCTION • MANAGEMENT

Studies • Reports • Design • Procurement

SAN FRANCISCO • Los Angeles • New York • Houston

BLACK & VEATCH

CONSULTING ENGINEERS

Electricity, Natural Gas and Water Utilities

Production, Transmission, Distribution

Reports, Design, Supervision of Construction

Investigations, Valuation and Rates

1500 MEADOW LAKE PARKWAY, KANSAS CITY 14, MISSOURI (SINCE 1915)

BONI, WATKINS, JASON & CO., INC.

Economic & Management Consultants

A Division of H. Zinder & Associates, Inc.

80 Pine Street
New York 5, N. Y.

724 Ninth Street, N.W.
Washington 1, D. C.

Rate Cases

Management and Market Studies

Rate of Return Analysis

Cost of Service Determination

Economic and Financial Reports



BURNS and ROE, Inc.

ENGINEERS • CONSULTANTS • CONSTRUCTORS

Engineering and Design • Research and Development • Construction •

Electric, Steam and Hydro Plants • Aeronautical and Missile

Facilities • Surveys • Nuclear, Chemical and Industrial Plants •

Transmission • Distribution • Reports

160 WEST BROADWAY, NEW YORK 13, NEW YORK

Washington, D. C. • Hempstead, L. I. • Santa Monica, Calif.

(Professional Directory Continued on Next Page)

PROFESSIONAL DIRECTORY

(continued)

Commonwealth

SERVICES INC. Management and Business Consultants

300 Park Ave., New York 22, N. Y., MUrray Hill 8-1800
1 Main St., Houston 2, Texas, CApital 2-9171
1612 K St., N.W., Washington 6, D. C., STerling 3-3363

ASSOCIATES INC. Consulting and Design Engineers

Commonwealth Building, Jackson, Mich., STate 4-6111

DAMES & MOORE

Consultants in Applied Earth Sciences

Subsurface investigations for foundations, groundwater, and subsurface structures. Air photo geological, and geophysical investigations for pipeline and transmission line routes. Geological-geophysical-soil mechanics investigations for recovery and use of marginal land, and for dam design and construction.

ATLANTA
NEW YORK

CHICAGO
PORTLAND

HONOLULU
SALT LAKE CITY

HOUSTON
SAN FRANCISCO

LOS ANGELES
SEATTLE

DAY & ZIMMERMANN, INC.

ENGINEERS & CONSTRUCTORS

NEW YORK

PHILADELPHIA

CHICAGO

Design — Electric Line Construction — Management — Reports and Valuations

EMPIRE GAS ENGINEERING CO.

P. O. Box 1738.
Atlanta 1, Georgia

L.P. gas
peak shaving
and stand-by
plants for
• municipalities
• industry
• design
• construction



Ford, Bacon & Davis

VALUATION
REPORTS

Engineers

CONSTRUCTION
RATE CASES

NEW YORK • MONROE, LA. • CHICAGO • SAN FRANCISCO

FOSTER ASSOCIATES, INC.

Rate Cases • Cost of Service and Other Regulatory Methods

Rate of Return Analyses • Rate Design

Natural Gas Field Price Problems • Economic and Financial Reports

1523 L STREET N.W.
WASHINGTON 5, D. C.

326 MAYO BUILDING
TULSA 3, OKLAHOMA

403 EMPIRE BUILDING
CALGARY, ALBERTA

FRANCISCO & JACOBUS

ENGINEER & ARCHITECT

*Specializing in the location and design of
Customers Service Centers and Operating Headquarters*

NEW YORK

WESTBURY

CLEVELAND

TUCSON

Mention the FORTNIGHTLY—It identifies your inquiry

PROFESSIONAL DIRECTORY
(continued)



GIBBS & HILL, INC.

Consulting Engineers

DESIGNERS • CONSTRUCTORS

PENNSYLVANIA STATION NEW YORK 1, N. Y.



GILBERT ASSOCIATES, INC.

ENGINEERS and CONSULTANTS

525 LANCASTER AVE.
READING, PA.

WASHINGTON • NEW YORK

W. C. GILMAN & COMPANY

CONSULTING ENGINEERS

ELECTRIC — GAS — TRANSIT — WATER

Financial and Economic Reports

Valuations—Rate of Return—Depreciation Studies

Traffic Surveys—Fare Analyses

55 Liberty Street

New York 5, N. Y.

HARZA ENGINEERING COMPANY

Consulting Engineers

REPORTS — DESIGN — SUPERVISION

HYDROELECTRIC PLANTS AND DAMS — TRANSMISSION LINES — FLOOD CONTROL —
IRRIGATION — RIVER BASIN DEVELOPMENT

400 West Madison Street

Chicago 6, Illinois

JENSEN, BOWEN & FARRELL
ENGINEERS

APPRAISALS — DEPRECIATION STUDIES — PROPERTY RECORDS
COST TRENDS — SPECIAL STUDIES — REPORTS

for Rate Cases, Security Issues, Regulatory and Accounting Requirements

Michigan Theatre Building

Ann Arbor, Michigan

Area Code
313

665-8833



The Kuljian Corporation

ENGINEERS • CONSTRUCTORS
POWER PLANT SPECIALISTS

DESIGN • CONSTRUCTION MANAGEMENT
SURVEYS • INVESTIGATIONS • REPORTS

1200 N. BROAD ST., PHILADELPHIA 21, PA.

N. A. LOUGEE & COMPANY

Engineers and Consultants

RATE CASES—APPRAISALS—DEPRECIATION STUDIES
BUSINESS AND FEASIBILITY STUDIES—REPORTS

120 Broadway

New York

(Professional Directory Continued on Next Page)

PROFESSIONAL DIRECTORY
(continued)

CHAS. T. MAIN, Inc.

BOSTON, MASSACHUSETTS
CHARLOTTE, NO. CAROLINA

SURVEYS • SYSTEM ANALYSIS • VALUATIONS •
DESIGN AND CONSTRUCTION MANAGEMENT
THERMAL AND HYDRO-ELECTRIC PLANTS •
POWER TRANSMISSION AND DISTRIBUTION

Pioneer Service & Engineering Co.

PUBLIC UTILITY
CONSULTING &
DESIGN ENGINEERS

231 SOUTH LA SALLE ST.



SPECIALISTS IN
ACCOUNTING, FINANCING,
RATES AND DEPRECIATION

CHICAGO 4

*Special Operating Studies
Planning and Design
Reports for Financing
Economic Studies
Regulatory Representation*

R.A. RANSOM COMPANY, INC.

consulting engineers with a business viewpoint

1025 Connecticut Ave., N.W., Washington 6, D.C.
61 Broadway, New York 6, N.Y.

SANDERSON & PORTER

CONSTRUCTION • REPORTS
SURVEYS

NEW YORK

NEW YORK

S & P

**SARGENT & LUNDY
ENGINEERS**

Consultants to the Power Industry

• STUDIES • DESIGN • SUPERVISION

140 South Dearborn Street, Chicago 3, Ill.



STANDARD RESEARCH CONSULTANTS, INC.

Rate of Return • Valuations • Capital Costs
Customer Surveys • Depreciation Studies
Regional Economic Studies • Property Records

345 Hudson St.

Watkins 4-6400

New York 14, N. Y.

**STONE & WEBSTER
ENGINEERING CORPORATION**

DESIGN • CONSTRUCTION • APPRAISALS • EXAMINATIONS
REPORTS • CONSULTING ENGINEERING



NEW YORK
90 Broad Street
BOSTON
49 Federal Street

Chicago

Houston

San Francisco

Los Angeles

Seattle

Toronto

Calgary

Mention the FORTNIGHTLY—It identifies your inquiry

PROFESSIONAL DIRECTORY
(concluded)



UNITED ENGINEERS

& Constructors Inc. • U.E.&C. (Canada) Ltd.

New York • Philadelphia • Chicago

Designers, construction engineers, and engineering consultants

Whitman, Requardt and Associates

DESIGN—SUPERVISION

REPORTS—VALUATIONS

Publishers of the **HANDY-WHITMAN INDEX OF PUBLIC UTILITY CONSTRUCTION COSTS**, now in its 35th year and a companion publication the **HANDY-WHITMAN INDEX OF WATER UTILITY CONSTRUCTION COSTS**

1304 ST. PAUL STREET

BALTIMORE 2, MARYLAND

BURNS & McDONNELL

Engineers-Architects-Consultants

4600 E. 63rd St. Trafficway
Kansas City 41, Missouri

Jackson & Moreland, Inc.
Jackson & Moreland International, Inc.
Engineers and Consultants

ELECTRICAL—MECHANICAL—STRUCTURAL
DESIGN AND SUPERVISION OF CONSTRUCTION
FOR
UTILITY, INDUSTRIAL AND ATOMIC PROJECTS
SURVEYS—APPRAISALS—REPORTS
TECHNICAL PUBLICATIONS
BOSTON — WASHINGTON — NEW YORK

EARL L. CARTER

Consulting Engineer

REGISTERED IN INDIANA, NEW YORK, OHIO,
PENNSYLVANIA, WEST VIRGINIA, KENTUCKY

*Public Utility Valuations, Reports and
Original Cost Studies*

910 Electric Building Indianapolis, Ind.

MINER AND MINER

CONSULTING ENGINEERS

INCORPORATED

GREELEY, COLORADO

Littleton, Colorado

Tucson, Arizona

Phoenix, Arizona

COFFIN & RICHARDSON, INC.

CONSULTING ENGINEERS

Appraisals and Valuations For Regulatory,
Tax, and Other Purposes
Rate Case Preparation—Cost of Service Studies
Original Cost and Depreciation Studies
Rate Design

68 Devonshire St., Boston 9, Massachusetts

A. S. SCHULMAN ELECTRIC CO.

Electrical Contracting Engineers

founded 1890

POWER STATION—INDUSTRIAL—
COMMERCIAL—TRANSMISSION LINES—
DISTRIBUTION

2416 S. MICHIGAN AVE. CHICAGO, ILL.

**ENGINEERS, CONSTRUCTION AND
MAINTENANCE CONTRACTORS
for the GAS INDUSTRY**



**CONSOLIDATED
GAS AND SERVICE CO.**

327 So. LaSalle St., Chicago 4, ILL.

SVERDRUP & PARCEL

Engineers & Consultants

Design, Construction Supervision
Steam and Hydro Power Plants
Power Systems—Industrial Plants
Studies—Reports

St. Louis • San Francisco • Washington

GANNETT FLEMING CORDRY AND CARPENTER, INC.

ENGINEERS

Investigations—Reports—Appraisals
Original Cost and Depreciation Studies
Rate Analyses—Insurance Surveys

HARRISBURG, PENNSYLVANIA

A. W. WILLIAMS INSPECTION CO., INC.

Specialized Inspection Service

Poles, Crossarms, Lumber, Piles, Crossties
Preservative Treatment and Preservative Analysis
208 Virginia St., Mobile, Ala.
New York St. Louis Portland
Inspectors stationed throughout the U.S.A.

Mention the FORTNIGHTLY—It identifies your inquiry

INDEX TO ADVERTISERS

A

*Allen & Company	
*Allis-Chalmers Manufacturing Company	21
American Appraisal Company, The	11
American Motors Corporation	
*Atomics International, A Division of North American Aviation, Inc.	

B

*Babcock & Wilcox Company	21
Bechtel Corporation	
*Better Light Better Sight Bureau	21
Black & Veatch Consulting Engineers	21
*Blyth & Company, Inc.	21
Boni, Watkins, Jason & Co., Inc.	25
Burns & McDonnell, Engineers	21
Burns & Roe, Inc.	

C

Carter, Earl L., Consulting Engineer	25
Coffin & Richardson, Inc.	19
Columbia Gas System, Inc., The	4-5
Combustion Engineering, Inc.	17, 22
Commonwealth Associates, Inc.	17, 22
Commonwealth Services, Inc.	25
Consolidated Gas and Services Company	

D

Dames & Moore	22
*Dana Corporation	
Day & Zimmermann, Inc., Engineers	22

E

*Eastman Dillon, Union Securities & Company	
*Ebasco Services Incorporated	
*Electro-Motive Division, General Motors	22
Empire Gas Engineering Company	

F

*Financial Analysts Journal, The	
*First Boston Corporation, The	22
Ford, Bacon & Davis, Inc., Engineer	22
Foster Associates, Inc.	22
Francisco & Jacobus	22

G

Gannett Fleming Corddry and Carpenter, Inc.	25
General Electric Company	Outside Back Cover
Gibbs & Hill, Inc., Consulting Engineers	23
*Gibson, A. C., Co., Inc.	23
Gilbert Associates, Inc., Engineers	23
Gilman, W. C., & Company, Engineers	23
*Glore, Forgan & Company	

H

*Halsey, Stuart & Company, Inc.	
*Harriman, Ripley & Company	23
Harza Engineering Company	

I

*International Business Machine Corp.	
Irving Trust Company	Inside Front Cover

J

Jackson & Moreland, Inc., Engineers	25
Jensen, Bowen & Farrell, Engineers	23

K

*Kellogg, M. W., Company, The	
*Kidder, Peabody & Company	
*Kuhn Loeb & Company	23
Kuljian Corporation, The	

L

*Langley, W. C. & Co.	
*Lehman Brothers	
*Loeb (Carl M.) Rhoades & Co.	23
Lougee, N. A., & Company	

M

Main, Chas. T., Inc., Engineers	24
*Merrill Lynch, Pierce, Fenner & Smith, Inc.	25
Miner & Miner, Consulting Engineers	
*Moloney Electric Company	
*Morgan Stanley & Company	

N

*National Association of Railroad & Utilities Commission	
--	--

O

*Osmose Wood Preserving Company of America, Inc.	
---	--

P

Pioneer Service & Engineering Company	Inside Back Cover, 24
*Pole Sprayers, Inc.	

R

Ransom, R. A., Company, Inc.	24
Recording & Statistical Corporation	16

S

*Solomon Brothers & Hutzler	24
Sanderson & Porter, Engineers	24
Sargent & Lundy, Engineers	25
Schulman, A. S., Electric Co., Engineers	24
*Smith Barney & Company	24
Standard Research Consultants, Inc.	24
Stone & Webster Engineering Corporation	9
Stone & Webster Service Corporation	25
Sverdrup & Parcel, Engineers & Consultants	

U

United Engineers & Constructors, Inc.	25
*United States Motors Corporation	

W

*Westinghouse Electric Corporation	
*White, Weld & Co.	25
Whitman, Requaardt and Associates	25
Williams, A. W., Inspection Co., Inc.	

Professional Directory 21-25

*Fortnightly advertisers not in this issue.

HYDRO

ATOMIC

the appropriate power
for your expanding program

Pioneer Service & Engineering Co.

231 SOUTH LA SALLE STREET • CHICAGO 4, ILLINOIS



FOSSIL FUEL



Complete service complements product reliability when you install a General Electric steam turbine-generator such as this 125,000-kw, tandem-compound, double-flow, reheat unit in the E. D. Edwards Station of Central Illinois Light Company

Always an evaluation factor— General Electric's personalized turbine-generator service

General Electric's complete service program for steam turbine-generators is personalized to your specific system requirements—to help you in your continuing efforts to produce reliable, low-cost electric power. This nation-wide service is readily available, to give you:

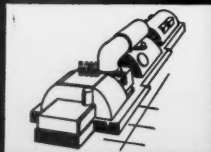
- turbine and generator engineering consultation
- installation planning and direction
- accelerated, on-time start-ups
- training of your personnel
- periodic service calls and consultation
- maintenance inspection and planning
- renewal parts scheduling
- priority repair service

At General Electric, service is always part of the total value you receive . . . it is not curtailed when prices are soft, when orders are slow, when profits are down . . . it is always part of your steam turbine-generator.

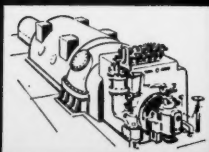
244-02

Progress Is Our Most Important Product
GENERAL  ELECTRIC

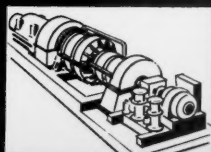
**General Electric
Turbine-Generators
Help Keep
Power Costs Low**



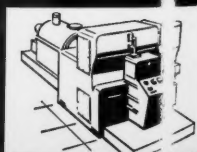
Steam turbine-generators for large blocks of power



Steam turbine-generators 100,000 horsepower



Gas turbines for peaking



Mechanical drive steam



for steam
system re-
efforts to
nation-wide

alls and con-

ection and

scheduling
service

of the total
prices are
n . . . it is

244-02

uct

RIC



drive steam